

# PhotoMOS<sup>®</sup> Selector Chart

GU: General use & wide variation **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		GU SOP										
		1 Form A					1 Form A					
		AC/DC					AC/DC					
Appearance configuration *Standoff height included												
mm inch												
Part No.		AQY212S	AQY210S	AQY214S	AQV212S	AQV215S	AQV217S	AQV210S	AQV214S	AQV216S		
Output	Load voltage	Peak AC	60V	350V	400V	60V	100V	200V	350V	400V	600V	
		DC	60V	350V	400V	60V	100V	200V	350V	400V	600V	
	Continuous load current *6-pin type: in case of A connection	1A										
		0.5A	0.5A	0.12A	0.1A	0.5A	0.3A	0.16A	0.12A	0.1A	0.04A	
	Peak load current	1.5A	0.3A	0.24A	1.5A	0.9A	0.48A	0.3A	0.3A	0.12A		
	Power dissipation	300mW					450mW					
	On resistance *6-pin type: in case of A connection	Typ.	0.83Ω	17Ω	25Ω	0.83Ω	2.3Ω	11Ω	23Ω	30Ω	70Ω	
		Max.	2.5Ω	25Ω	35Ω	2.5Ω	4.0Ω	15Ω	35Ω	50Ω	120Ω	
	Output capacitance (Typ.)		80pF	45pF		80pF	110pF	70pF	45pF			
	Off state leakage current (Max.)		1μA					1μA				
Input	LED forward current	50mA					50mA					
	LED reverse voltage	5V					5V					
	Peak forward current	1A					1A					
	Power dissipation	75mW					75mW					
	LED operate current	Typ.	0.9mA					0.7mA				
		Max.	3mA					3mA				
	LED turn off current	Min.	0.4mA					0.4mA				
Typ.		0.85mA					0.65mA					
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)					1.25V (1.14V at I <sub>F</sub> = 5mA)					
	Max.	1.5V					1.5V					
Turn on time	Typ.	0.65ms	0.23ms	0.21ms	0.65ms	0.60ms	0.25ms	0.25ms	0.28ms			
	Max.	2ms	0.5ms	0.5ms	2ms	2ms	1ms	0.5ms	0.5ms			
Turn off time	Typ.	0.08ms	0.04ms		0.08ms	0.06ms	0.05ms			0.04ms		
	Max.	0.2ms	0.2ms		0.2ms	0.2ms	0.2ms			0.2ms		
Total power dissipation		350mW					500mW					
I/O isolation voltage		1,500Vrms					1,500Vrms					
Ambient temperature	Operating	-40 to +85°C -40 to +185°F					-40 to +85°C -40 to +185°F					
	Storage	-40 to +100°C -40 to +212°F					-40 to +100°C -40 to +212°F					
I/O capacitance	Typ.	—					0.8pF					
	Max.	1.5pF					1.5pF					
Initial I/O isolation resistance (Min.)		1,000MΩ					1,000MΩ					
Terminal layout and recommended PC board pattern												
• Tolerance: ±0.1 ±.004	mm inch	TOP VIEW					TOP VIEW					
Safety standards		UL/C-UL, BSI					UL/C-UL					
Mass (weight) (approx.)		0.084g .003oz					0.125g .004oz					
Packing style		Tube packing, Tape and reel packing										

# PhotoMOS® Selector Chart

GU: General use & wide variation **GU** GE CC RF HE HF HS PD Power

Product name		GU SOP High Capacity			GU SOP High Capacity Voltage-sensitive	GU High Capacity	
		1 Form A			1 Form A	1 Form A	
		AC/DC			AC/DC	AC/DC	
Appearance configuration *Standoff height included							
Part No.		AQY211G2S	AQY212G2S	AQY212GS	AQY212FG2S	AQY212GH	
Load voltage	Peak AC	40V	60V		60V	60V	
	DC	40V	60V		60V	60V	
Output	Continuous load current	1.5A	1.6A	1.25A	1A	1.25A	1.1A
		1A					
		0.5A					
	Peak load current	4.0A		3.0A		3.0A	3.0A
Power dissipation		400mW			400mW	500mW	
On resistance	Typ.	0.1Ω	0.2Ω	0.34Ω	0.2Ω	0.34Ω	
	Max.	0.15Ω	0.5Ω	0.7Ω	0.5Ω	0.7Ω	
Output capacitance (Typ.)		180pF	150pF	220pF	150pF	220pF	
Off state leakage current (Max.)		1μA			1μA	1μA	
Input	LED forward current		50mA		Input voltage: 6V	50mA	
	LED reverse voltage		5V		Input reverse voltage: 5V	5V	
	Peak forward current		1A		—	1A	
	Power dissipation		75mW		65mW	75mW	
	LED operate current	Typ.	0.9mA	1.1mA		Operate voltage: 1.4V 4V	1.1mA
		Max.	3mA	3mA			3mA
	LED turn off current	Min.	0.2mA	0.3mA		Turn off voltage: 0.8V 1.4V	0.3mA
Typ.		0.8mA	1mA		1mA		
LED dropout voltage		Typ.	1.32V (1.14V at I <sub>F</sub> = 5mA)			1.32V (1.14V at I <sub>F</sub> = 5mA)	
	Max.	1.5V			Input current: 8.5mA (V <sub>IN</sub> = 5V)	1.5V	
Turn on time	Typ.	1ms	1.3ms		0.7ms	1.3ms	
	Max.	3ms	5ms		5ms	5ms	
Turn off time	Typ.	0.12ms	0.1ms		0.1ms	0.1ms	
	Max.	0.5ms	0.5ms		0.5ms	0.5ms	
Total power dissipation		450mW			450mW	550mW	
I/O isolation voltage		1,500Vrms			500Vrms	5,000Vrms	
Ambient temperature	Operating	-40 to +85°C -40 to +185°F			-40 to +85°C -40 to +185°F	-40 to +85°C -40 to +185°F	
	Storage	-40 to +100°C -40 to +212°F			-40 to +100°C -40 to +212°F	-40 to +100°C -40 to +212°F	
I/O capacitance	Typ.	0.8pF			0.8pF	0.8pF	
	Max.	1.5pF			1.5pF	1.5pF	
Initial I/O isolation resistance (Min.)		1,000MΩ			1,000MΩ	1,000MΩ	
Terminal layout and recommended PC board pattern							
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW			TOP VIEW	BOTTOM VIEW TOP VIEW	
Safety standards		UL/C-UL, VDE			UL/C-UL, VDE	UL/C-UL, VDE	
Mass (weight) (approx.)		0.084g .003oz			0.084g .003oz	0.19g .007oz	
Packing style		Tube packing, Tape and reel packing					

GU: General use & wide variation **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		GU							
		1 Form A							
		AC/DC							
Appearance configuration *Standoff height included									
Part No.		AQV212	AQV215	AQV217	AQV210	AQV214	AQV216	AQV214H	
Load voltage	Peak AC	60V	100V	200V	350V	400V	600V	400V	
	DC	60V	100V	200V	350V	400V	600V	400V	
Output	Continuous load current *6-pin type: in case of A connection								
	Peak load current	1.5A	0.96A	0.54A	0.4A	0.3A	0.15A	0.3A	
	Power dissipation	500mW							
	On resistance *6-pin type: in case of A connection	Typ.	0.83Ω	2.3Ω	11Ω	23Ω	30Ω	70Ω	30Ω
		Max.	2.5Ω	4Ω	15Ω	35Ω	50Ω	120Ω	50Ω
	Output capacitance (Typ.)		80pF	110pF	70pF	45pF			
	Off state leakage current (Max.)		1μA						
Input	LED forward current	50mA							
	LED reverse voltage	5V							
	Peak forward current	1A							
	Power dissipation	75mW							
	LED operate current	Typ.	1mA						1.3mA
		Max.	3mA						3mA
	LED turn off current	Min.	0.4mA						0.4mA
	Typ.	0.79mA						1.2mA	
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>f</sub> = 5mA)							
	Max.	1.5V							
Turn on time	Typ.	0.65ms	0.60ms	0.25ms	0.25ms	0.21ms	0.28ms	0.60ms	
	Max.	2ms	2ms	1ms	0.5ms	0.5ms	0.5ms	0.8ms	
Turn off time	Typ.	0.08ms	0.06ms	0.05ms	0.05ms	0.05ms	0.04ms	0.05ms	
	Max.	0.2ms	0.2ms	0.2ms	0.2ms	0.2ms	0.2ms	0.2ms	
Total power dissipation		550mW							
I/O isolation voltage		1,500Vrms						5,000Vrms	
Ambient temperature	Operating	-40 to +85°C -40 to +185°F							
	Storage	-40 to +100°C -40 to +212°F							
I/O capacitance	Typ.	0.8pF							
	Max.	1.5pF							
Initial I/O isolation resistance (Min.)		1,000MΩ							
Terminal layout and recommended PC board pattern		<p>Through hole terminal</p>				<p>Surface mount terminal</p>			
		BOTTOM VIEW				TOP VIEW			
	• Tolerance: ±0.1 ±.004 mm inch								
Safety standards		UL/C-UL						UL/C-UL, BSI	
Mass (weight) (approx.)		0.453g .016oz							
Packing style		Tube packing, Tape and reel packing							

# PhotoMOS® Selector Chart

GU: General use & wide variation

**GU** GE CC RF HE HF HS PD Power

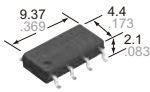
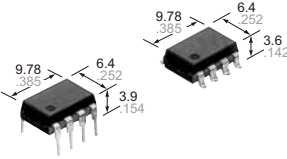
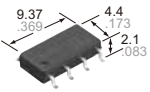
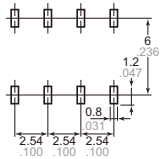
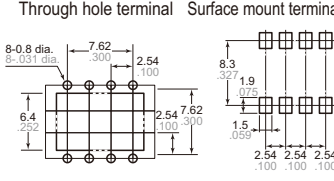
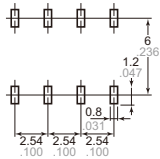
Product name		GU SOP			GU						
		2 Form A			2 Form A						
		AC/DC			AC/DC						
Appearance configuration *Standoff height included											
Part No.		AQW212S	AQW210S	AQW214S	AQW212	AQW215	AQW217	AQW210	AQW214	AQW216	
Load voltage	Peak AC	60V	350V	400V	60V	100V	200V	350V	400V	600V	
	DC	60V	350V	400V	60V	100V	200V	350V	400V	600V	
Output	Continuous load current	1A			0.5A						
		0.5A			0.5A						
		0.4A	0.1A	0.08A	0.5A	0.3A	0.16A	0.12A	0.1A	0.04A	
	Peak load current	1.5A	0.3A	0.24A	1.5A	0.9A	0.48A	0.36A	0.3A	0.12A	
Power dissipation		600mW			800mW						
On resistance	Typ.	0.83Ω	16Ω	30Ω	0.83Ω	2.3Ω	11Ω	23Ω	30Ω	70Ω	
	Max.	2.5Ω	35Ω	50Ω	2.5Ω	4Ω	15Ω	35Ω	50Ω	120Ω	
Output capacitance (Typ.)		80pF	45pF		80pF	110pF	70pF	45pF			
Off state leakage current (Max.)		1μA			1μA						
Input	LED forward current	50mA			50mA						
	LED reverse voltage	5V			5V						
	Peak forward current	1A			1A						
	Power dissipation	75mW			75mW						
	LED operate current	Typ.	0.9mA			0.9mA					
		Max.	3mA			3mA					
	LED turn off current	Min.	0.4mA			0.4mA					
		Typ.	0.8mA			0.8mA					
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)			1.25V (1.14V at I <sub>F</sub> = 5mA)						
	Max.	1.5V			1.5V						
Turn on time	Typ.	0.65ms	0.23ms	0.21ms	0.65ms	0.60ms	0.25ms	0.25ms	0.31ms	0.28ms	
	Max.	2ms	0.5ms	0.5ms	2ms	2ms	1.0ms	0.5ms	0.5ms	0.5ms	
Turn off time	Typ.	0.08ms	0.04ms		0.08ms	0.06ms	0.05ms		0.04ms		
	Max.	0.2ms	0.2ms		0.2ms	0.2ms	0.2ms		0.2ms		
Total power dissipation		650mW			850mW						
I/O isolation voltage		1,500Vrms			1,500Vrms						
Ambient temperature	Operating	-40 to +85°C -40 to +185°F			-40 to +85°C -40 to +185°F						
	Storage	-40 to +100°C -40 to +212°F			-40 to +100°C -40 to +212°F						
I/O capacitance	Typ.	0.8pF			0.8pF						
	Max.	1.5pF			1.5pF						
Initial I/O isolation resistance (Min.)		1,000MΩ			1,000MΩ						
Terminal layout and recommended PC board pattern					<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Through hole terminal</p> <p>BOTTOM VIEW</p> </div> <div style="text-align: center;"> <p>Surface mount terminal</p> <p>TOP VIEW</p> </div> </div>						
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW			TOP VIEW						
Safety standards		UL/C-UL, BSI			UL/C-UL						
Mass (weight) (approx.)		0.195g .007oz			0.5g .017oz						
Packing style		Tube packing, Tape and reel packing									

GU: General use & wide variation **GU** GE CC RF HE HF HS PD Power

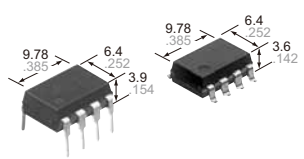
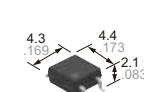
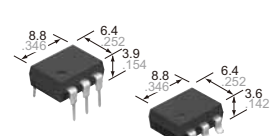
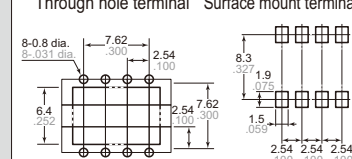
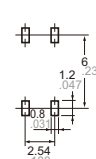
Product name		GU SOP			GU		
		1 Form B		1 Form B	1 Form B		
		AC/DC		AC/DC	AC/DC		
Appearance configuration *Standoff height included							
mm inch							
Part No.		AQY412S	AQY410S	AQY414S	AQV414S	AQV414	
Load voltage	Peak AC	60V	350V	400V	400V	400V	
	DC	60V	350V	400V	400V	400V	
Output	Continuous load current *6-pin type: in case of A connection	1A					
		0.5A	0.5A	0.12A	0.1A	0.1A	
	Peak load current	1.5A	0.3A	0.24A	0.3A	0.3A	
	Power dissipation	300mW		450mW	500mW		
	On resistance *6-pin type: in case of A connection	Typ.	1Ω	18Ω	26Ω	26Ω	26Ω
		Max.	2.5Ω	25Ω	35Ω	50Ω	50Ω
	Output capacitance (Typ.)		500pF	110pF	100pF	100pF	100pF
Off state leakage current (Max.)		1μA		1μA	1μA		
Input	LED forward current	50mA		50mA	50mA		
	LED reverse voltage	5V		5V	5V		
	Peak forward current	1A		1A	1A		
	Power dissipation	75mW		75mW	75mW		
	LED operate current	Typ.	0.9mA		0.6mA	1mA	
		Max.	3mA		3mA	3mA	
	LED turn off current	Min.	0.4mA		0.4mA	0.4mA	
Typ.		0.85mA		0.55mA	0.95mA		
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>f</sub> = 5mA)		1.25V (1.14V at I <sub>f</sub> = 5mA)	1.25V (1.14V at I <sub>f</sub> = 5mA)		
	Max.	1.5V		1.5V	1.5V		
Turn on time	Typ.	0.9ms	0.52ms	0.47ms	0.47ms	0.47ms	
	Max.	3ms	1ms	1ms	1ms	1ms	
Turn off time	Typ.	0.21ms	0.23ms	0.28ms	0.28ms	0.28ms	
	Max.	1ms	1ms	1ms	1ms	1ms	
Total power dissipation		350mW		500mW	550mW		
I/O isolation voltage		1,500Vrms		1,500Vrms	1,500Vrms		
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F	-40 to +85°C -40 to +185°F		
	Storage	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F	-40 to +100°C -40 to +212°F		
I/O capacitance	Typ.	0.8pF		0.8pF	0.8pF		
	Max.	1.5pF		1.5pF	1.5pF		
Initial I/O isolation resistance (Min.)		1,000MΩ		1,000MΩ	1,000MΩ		
Terminal layout and recommended PC board pattern							
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW		TOP VIEW	BOTTOM VIEW	TOP VIEW	
Safety standards		UL/C-UL, VDE	UL/C-UL, BSI		UL/C-UL	UL/C-UL	
Mass (weight) (approx.)		0.084g .003oz		0.125g .004oz	0.453g .016oz		
Packing style		Tube packing, Tape and reel packing					

# PhotoMOS® Selector Chart

GU: General use & wide variation **GU** GE CC RF HE HF HS PD Power

Product name		GU SOP	GU	GU SOP	
Appearance configuration *Standoff height included					
Part No.		AQW414S	AQW414	AQW612S   AQW610S	
Load voltage	Peak AC	400V	400V	60V   350V	
	DC	400V	400V	60V   350V	
Continuous load current	1A				
	0.5A			0.45A	
Peak load current		0.08A	0.1A	1.5A   0.3A	
Power dissipation		600mW	800mW	600mW	
On resistance	Typ.	26Ω	26Ω	1Ω   18Ω	
	Max.	50Ω	50Ω	2.5Ω   25Ω	
Output capacitance (Typ.)		100pF	100pF	80pF (N.O.) 500pF(N.C.)   45pF (N.O.) 100pF (N.C.)	
Off state leakage current (Max.)		1μA	1μA	1μA	
Input	LED forward current	50mA	50mA	50mA	
	LED reverse voltage	5V	5V	5V	
	Peak forward current	1A	1A	1A	
	Power dissipation	75mW	75mW	75mW	
	LED operate current	Typ.	0.9mA	0.7mA	0.9mA
		Max.	3mA	3mA	3mA
LED turn off current	Min.	0.4mA	0.4mA	0.4mA	
	Typ.	0.8mA	0.64mA	0.8mA	
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)	1.25V (1.14V at I <sub>F</sub> = 5mA)	1.25V (1.14V at I <sub>F</sub> = 5mA)	
	Max.	1.5V	1.5V	1.5V	
Turn on time	Typ.	0.43ms	0.46ms	0.65ms (N.O.) 0.9ms (N.C.)   0.28ms (N.O.) 0.52ms (N.C.)	
	Max.	1ms	1ms	3ms   1ms	
Turn off time	Typ.	0.3ms	0.40ms	0.08ms (N.O.) 0.2ms (N.C.)   0.04ms (N.O.) 0.23ms (N.C.)	
	Max.	1ms	1ms	1ms   1ms	
Total power dissipation		650mW	850mW	650mW	
I/O isolation voltage		1,500Vrms	1,500Vrms	1,500Vrms	
Ambient temperature	Operating	-40 to +85°C -40 to +185°F	-40 to +85°C -40 to +185°F	-40 to +85°C -40 to +185°F	
	Storage	-40 to +100°C -40 to +212°F	-40 to +100°C -40 to +212°F	-40 to +100°C -40 to +212°F	
I/O capacitance	Typ.	0.8pF	0.8pF	0.8pF	
	Max.	1.5pF	1.5pF	1.5pF	
Initial I/O isolation resistance (Min.)		1,000MΩ	1,000MΩ	1,000MΩ	
Terminal layout and recommended PC board pattern					
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW	BOTTOM VIEW   TOP VIEW	TOP VIEW	
Safety standards		UL/C-UL, BSI	UL/C-UL	UL/C-UL, VDE   UL/C-UL, BSI	
Mass (weight) (approx.)		0.195g .007oz	0.5g .017oz	0.195g .007oz	
Packing style			Tube packing, Tape and reel packing		

GU
GE
CC
RF
HE
HF
HS
PD
Power

Product name		GU	GU SOP Short Circuit Protection (Latch type)	GU Short Circuit Protection (Non-latch type)
		1 Form A & 1 Form B	1 Form A	1 Form A
		AC/DC	AC/DC	DC
Appearance configuration *Standoff height included  mm inch				
				
Part No.		AQW614	AQY210KS	AQV112KL
Load voltage	Peak AC	400V	350V	—
	DC	400V	350V	60V
Output	Continuous load current *6-pin type: in case of A connection	1A		
		0.5A		0.5A
	Peak load current	0.1A	0.12A	—
	Power dissipation	800mW	400mW	500mW
	On resistance *6-pin type: in case of A connection	Typ. Max.	27Ω 50Ω	23.5Ω 35Ω
Output capacitance (Typ.)		45pF (N.O.) 100pF (N.C.)		42pF
Off state leakage current (Max.)		1μA		1μA
Input	LED forward current		50mA	
	LED reverse voltage		5V	
	Peak forward current		1A	
	Power dissipation		75mW	
	LED operate current	Typ.	0.9mA	
		Max.	3mA	
	LED turn off current	Min.	0.4mA	
		Typ.	0.8mA	
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)		
	Max.	1.5V		
Turn on time	Typ.	0.28ms (N.O.) 0.43ms (N.C.)		
	Max.	1ms		
Turn off time	Typ.	0.04ms (N.O.) 0.3ms (N.C.)		
	Max.	1ms		
Total power dissipation		850mW		450mW
I/O isolation voltage		1,500Vrms		1,500Vrms
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F
	Storage	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F
I/O capacitance	Typ.	0.8pF		0.8pF
	Max.	1.5pF		1.5pF
Initial I/O isolation resistance (Min.)		1,000MΩ		1,000MΩ
Terminal layout and recommended PC board pattern		Through hole terminal    Surface mount terminal		Through hole terminal    Surface mount terminal
				
• Tolerance: ±0.1 ±0.004 mm inch		BOTTOM VIEW    TOP VIEW		BOTTOM VIEW    TOP VIEW
Safety standards		UL/C-UL		UL/C-UL, BSI
Mass (weight) (approx.)		0.5g .017oz		0.084g .003oz
Packing style				Tube packing, Tape and reel packing

# PhotoMOS<sup>®</sup> Selector Chart

GU: General use & wide variation **GU** GE CC RF HE HF HS PD Power

Product name		GU SOP Current Limiting	GU Current Limiting
		1 Form A	1 Form A
		AC/DC	AC/DC
Appearance configuration *Standoff height included			
mm inch			
Part No.		AQY210LS	AQY210HL
Output	Load voltage	Peak AC	350V
		DC	350V
	Continuous load current	1A	
		0.5A	
	Peak load current	0.12A	0.12A
	Power dissipation	400mW	500mW
	On resistance	Typ.	20Ω
		Max.	25Ω
	Output capacitance (Typ.)	45pF	45pF
	Off state leakage current (Max.)	1μA	1μA
Input	LED forward current	50mA	50mA
	LED reverse voltage	5V	5V
	Peak forward current	1A	1A
	Power dissipation	75mW	75mW
	LED operate current	Typ.	1.2mA
		Max.	3mA
	LED turn off current	Min.	0.4mA
		Typ.	1.1mA
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)	
	Max.	1.5V	
Turn on time	Typ.	0.5ms	
	Max.	2ms	
Turn off time	Typ.	0.08ms	
	Max.	1ms	
Total power dissipation	450mW	550mW	
I/O isolation voltage	1,500Vrms	5,000Vrms	
Ambient temperature	Operating	-40 to +85°C -40 to +185°F	
	Storage	-40 to +100°C -40 to +212°F	
I/O capacitance	Typ.	0.8pF	
	Max.	1.5pF	
Initial I/O isolation resistance (Min.)	1,000MΩ	1,000MΩ	
Terminal layout and recommended PC board pattern			
• Tolerance: ±0.1 ±.004	mm inch		
Safety standards	UL/C-UL, BSI		
Mass (weight) (approx.)	0.084g .003oz	0.19g .007oz	
Packing style	Tube packing, Tape and reel packing		



GE: General use and Economical **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		GE					
		1 Form A					
		AC/DC					
Appearance configuration *Standoff height included							
Part No.		AQY211EH	AQY212EH	AQY210EH	AQY214EH	AQY216EH	
Load voltage	Peak AC	30V	60V	350V	400V	600V	
	DC	30V	60V	350V	400V	600V	
Output	Continuous load current	1A	1A	0.13A	0.12A	0.05A	
		0.5A	0.55A				
		Peak load current	3A	1.5A	0.4A	0.3A	0.15A
	Power dissipation	500mW					
	On resistance	Typ.	0.25Ω	0.85Ω	18Ω	26Ω	52Ω
		Max.	0.5Ω	2.5Ω	25Ω	35Ω	120Ω
	Output capacitance (Typ.)		240pF	80pF	45pF		35pF
Off state leakage current (Max.)		1μA					
Input	LED forward current	50mA					
	LED reverse voltage	5V					
	Peak forward current	1A					
	Power dissipation	75mW					
	LED operate current	Typ.	1.2mA				
		Max.	3mA				
	LED turn off current	Min.	0.4mA				
Typ.		1.1mA					
LED dropout voltage	Typ. Max.	1.25V (1.14V at I <sub>F</sub> = 5mA) 1.5V					
Turn on time	Typ.	1.5ms	1ms	0.5ms			
	Max.	5ms	4ms	2ms			
Turn off time	Typ.	0.1ms	0.05ms	0.08ms		0.04ms	
	Max.	1ms	1ms	1ms		1ms	
Total power dissipation		550mW					
I/O isolation voltage		5,000Vrms					
Ambient temperature	Operating	-40 to +85°C -40 to +185°F					
	Storage	-40 to +100°C -40 to +212°F					
I/O capacitance	Typ.	0.8pF					
	Max.	1.5pF					
Initial I/O isolation resistance (Min.)		1,000MΩ					
Terminal layout and recommended PC board pattern		<p>Through hole terminal      Surface mountminal</p>					
• Tolerance: ±0.1 ±.004	mm inch						
Safety standards		UL/C-UL	UL/C-UL, BSI				
Mass (weight) (approx.)		0.19g .007oz					
Packing style		Tube packing, Tape and reel packing					

# PhotoMOS<sup>®</sup> Selector Chart

GE: General use and Economical **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		GE		
		1 Form A		
		AC/DC		
Appearance configuration *Standoff height included				
mm inch				
Part No.		AQV210EH	AQV214EH	
Output	Load voltage	Peak AC	350V	400V
		DC	350V	400V
	Continuous load current *6-pin type: in case of A connection	1A	.....	
		0.5A	.....	
			0.13A	0.12A
	Peak load current	0.4A		0.3A
	Power dissipation	500mW		
	On resistance *6-pin type: in case of A connection	Typ.	23Ω	30Ω
		Max.	35Ω	50Ω
	Output capacitance (Typ.)	45pF		
Off state leakage current (Max.)	1μA			
Input	LED forward current	50mA		
	LED reverse voltage	5V		
	Peak forward current	1A		
	Power dissipation	75mW		
	LED operate current	Typ.	1.6mA	
		Max.	3mA	
	LED turn off current	Min.	0.4mA	
Typ.		1.5mA		
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)		
	Max.	1.5V		
Turn on time	Typ.	0.7ms		
	Max.	2ms		
Turn off time	Typ.	0.05ms		
	Max.	1ms		
Total power dissipation	550mW			
I/O isolation voltage	5,000Vrms			
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		
	Storage	-40 to +100°C -40 to +212°F		
I/O capacitance	Typ.	0.8pF		
	Max.	1.5pF		
Initial I/O isolation resistance (Min.)	1,000MΩ			
Terminal layout and recommended PC board pattern				
• Tolerance: ±0.1 ±.004	mm inch			
Safety standards	UL/C-UL, BSI			
Mass (weight) (approx.)	0.453g .016oz			
Packing style	Tube packing, Tape and reel packing			

GE: General use and Economical **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		GE				
		2 Form A				
		AC/DC				
Appearance configuration *Standoff height included						
Part No.		AQW212EH	AQW210EH	AQW214EH	AQW216EH	
Load voltage	Peak AC	60V	350V	400V	600V	
	DC	60V	350V	400V	600V	
Output	Continuous load current	1A	.....			
		0.5A	0.5A	0.12A	0.1A	0.04A
	Peak load current	1.5A	0.36A	0.3A	0.12A	
	Power dissipation	800mW				
	On resistance	Typ.	0.83Ω	18Ω	26Ω	52Ω
		Max.	2.5Ω	25Ω	35Ω	120Ω
	Output capacitance (Typ.)		80pF	45pF		35pF
Off state leakage current (Max.)		1μA				
Input	LED forward current	50mA				
	LED reverse voltage	5V				
	Peak forward current	1A				
	Power dissipation	75mW				
	LED operate current	Typ.	1.2mA			
		Max.	3mA			
	LED turn off current	Min.	0.4mA			
Typ.		1.1mA				
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)				
	Max.	1.5V				
Turn on time	Typ.	1.0ms	0.5ms			
	Max.	4.0ms	2ms			
Turn off time	Typ.	0.08ms			0.04ms	
	Max.	1ms			1ms	
Total power dissipation		850mW				
I/O isolation voltage		5,000Vrms				
Ambient temperature	Operating	-40 to +85°C -40 to +185°F				
	Storage	-40 to +100°C -40 to +212°F				
I/O capacitance	Typ.	0.8pF				
	Max.	1.5pF				
Initial I/O isolation resistance (Min.)		1,000MΩ				
Terminal layout and recommended PC board pattern						
• Tolerance: ±0.1 ±.004	mm inch					
Safety standards		UL/C-UL, BSI				
Mass (weight) (approx.)		0.4g .014oz				
Packing style		Tube packing, Tape and reel packing				

# PhotoMOS® Selector Chart

GE: General use and Economical **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**




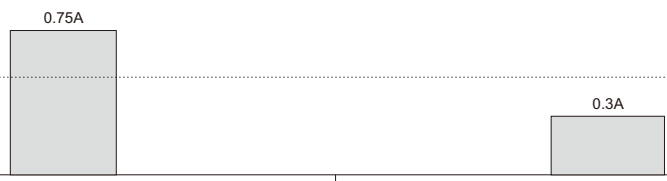
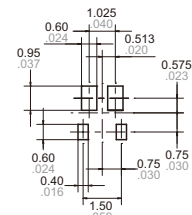
Product name		GE							
		1 Form B			1 Form B				
		AC/DC			AC/DC				
Appearance configuration *Standoff height included									
mm inch									
Part No.		AQY412EH	AQY410EH	AQY414EH	AQV412EH	AQV410EH	AQV414EH		
Load voltage	Peak AC	60V	350V	400V	60V	350V	400V		
	DC	60V	350V	400V	60V	350V	400V		
Output	Continuous load current *6-pin type: in case of A connection								
	1A								
	0.5A								
	Peak load current		1.5A	0.4A	0.3A	1.5A	0.4A	0.3A	
	Power dissipation		500mW			500mW			
	On resistance *6-pin type: in case of A connection	Typ.	1Ω	18Ω	26Ω	1Ω	18Ω	25.2Ω	
		Max.	2.5Ω	25Ω	35Ω	2.5Ω	35Ω	50Ω	
Output capacitance (Typ.)		500pF	110pF	100pF	500pF	110pF	100pF		
Off state leakage current (Max.)		10μA			10μA				
Input	LED forward current		50mA			50mA			
	LED reverse voltage		5V			5V			
	Peak forward current		1A			1A			
	Power dissipation		75mW			75mW			
	LED operate current	Typ.	1.4mA			1.9mA			
		Max.	3mA			3mA			
	LED turn off current	Min.	0.4mA			0.4mA			
Typ.		1.3mA			1.8mA				
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)			1.25V (1.14V at I <sub>F</sub> = 5mA)				
	Max.	1.5V			1.5V				
Turn on time		Typ. 3ms Max. 10ms	Typ. 1ms Max. 3ms	Typ. 0.8ms Max. 3ms	Typ. 3ms Max. 8ms	Typ. 1.5ms Max. 3ms	Typ. 1.3ms Max. 3ms		
Turn off time		Typ. 0.2ms Max. 1ms	Typ. 0.3ms Max. 1ms	Typ. 0.2ms Max. 1ms	Typ. 0.3ms Max. 1.5ms				
Total power dissipation		550mW			550mW				
I/O isolation voltage		5,000Vrms			5,000Vrms				
Ambient temperature	Operating	-40 to +85°C -40 to +185°F			-40 to +85°C -40 to +185°F				
	Storage	-40 to +100°C -40 to +212°F			-40 to +100°C -40 to +212°F				
I/O capacitance	Typ.	0.8pF			0.8pF				
	Max.	1.5pF			1.5pF				
Initial I/O isolation resistance (Min.)		1,000MΩ			1,000MΩ				
Terminal layout and recommended PC board pattern		Through hole terminal		Surface mount terminal		Through hole terminal		Surface mount terminal	
• Tolerance: ±0.1 ±.004 mm inch		BOTTOM VIEW		TOP VIEW		BOTTOM VIEW		TOP VIEW	
Safety standards		UL/C-UL, VDE		UL/C-UL, BSI		UL/C-UL, VDE		UL/C-UL, BSI	
Mass (weight) (approx.)		0.19g .007oz			0.453g .016oz				
Packing style		Tube packing, Tape and reel packing							

GE: General use and Economical **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**


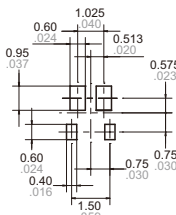
Product name		GE					
		2 Form B		1 Form A & 1 Form B			
		AC/DC		AC/DC			
Appearance configuration *Standoff height included							
mm inch							
Part No.		AQW414EH		AQW612EH	AQW610EH	AQW614EH	
Output	Load voltage	Peak AC	400V	60V	350V	400V	
		DC	400V	60V	350V	400V	
	Continuous load current	1A					
		0.5A		0.5A			
	Peak load current		0.1A	1.5A	0.12A	0.1A	
	Power dissipation		800mW	800mW	800mW	800mW	
	On resistance	Typ.	26Ω	1Ω	18Ω	26Ω	
		Max.	35Ω	2.5Ω	25Ω	35Ω	
	Output capacitance (Typ.)		100pF	80pF (N.O.), 500pF (N.C.)	45pF (N.O.), 100pF (N.C.)	45pF (N.O.), 100pF (N.C.)	
	Off state leakage current (Max.)		10μA	1μA (N.O.), 10μA (N.C.)	1μA (N.O.), 10μA (N.C.)	1μA (N.O.), 10μA (N.C.)	
Input	LED forward current		50mA	50mA	50mA		
	LED reverse voltage		5V	5V	5V		
	Peak forward current		1A	1A	1A		
	Power dissipation		75mW	75mW	75mW		
	LED operate current	Typ.	1.3mA	1.4mA	1.4mA		
		Max.	3mA	3mA	3mA		
	LED turn off current	Min.	0.4mA	0.4mA	0.4mA		
Typ.		1.2mA	1.3mA	1.3mA			
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>f</sub> = 5mA)	1.25V (1.14V at I <sub>f</sub> = 5mA)	1.25V (1.14V at I <sub>f</sub> = 5mA)			
	Max.	1.5V	1.5V	1.5V			
Turn on time	Typ.	0.8ms	1ms (N.O.), 3ms (N.C.)	0.5ms (N.O.), 1ms (N.C.)	0.5ms (N.O.), 0.8ms (N.C.)		
	Max.	3ms	4ms (N.O.), 10ms (N.C.)	3ms	3ms		
Turn off time	Typ.	0.2ms	0.05ms (N.O.), 0.2ms (N.C.)	0.08ms (N.O.), 0.3ms (N.C.)	0.08ms (N.O.), 0.2ms (N.C.)		
	Max.	1ms	1ms	1ms	1ms		
Total power dissipation		850mW	850mW	850mW			
I/O isolation voltage		5,000Vrms	5,000Vrms	5,000Vrms			
Ambient temperature	Operating	-40 to +85°C -40 to +185°F	-40 to +85°C -40 to +185°F	-40 to +85°C -40 to +185°F			
	Storage	-40 to +100°C -40 to +212°F	-40 to +100°C -40 to +212°F	-40 to +100°C -40 to +212°F			
I/O capacitance	Typ.	0.8pF	0.8pF	0.8pF			
	Max.	1.5pF	1.5pF	1.5pF			
Initial I/O isolation resistance (Min.)		1,000MΩ	1,000MΩ	1,000MΩ			
Terminal layout and recommended PC board pattern	Through hole terminal			Through hole terminal	Surface mount terminal		
	Surface mount terminal						
• Tolerance: ±0.1 ±.004 mm inch		BOTTOM VIEW TOP VIEW		BOTTOM VIEW TOP VIEW			
Safety standards		UL/C-UL, BSI	UL/C-UL, VDE	UL/C-UL, BSI			
Mass (weight) (approx.)		0.4g .014oz	0.4g .014oz	0.4g .014oz			
Packing style		Tube packing, Tape and reel packing					

# PhotoMOS® Selector Chart

CC: Capacitor Coupled isolation **GU** **GE** **CC** RF HE HF HS PD Power

Product name		CC TSON C×R		
		1 Form A		
		AC/DC		
Appearance configuration *Standoff height included				
mm inch		 		
Part No.		AQY2C1R6P	AQY2C1R2P	
Output	Load voltage	Peak AC	30V	40V
		DC	30V	40V
	Continuous load current	1A		
		0.5A		
	Peak load current		1.5A	0.75A
	Power dissipation		250mW	
	On resistance	Typ.	0.2Ω (V <sub>IN</sub> = 5V)	0.8Ω (V <sub>IN</sub> = 5V)
		Max.	0.4Ω (V <sub>IN</sub> = 5V)	1.5Ω (V <sub>IN</sub> = 5V)
	Output capacitance (Typ.)		40pF	14.5pF
	Off state leakage current (Max.)		10nA	
Input	Input voltage		5.5V	
	Input reverse voltage		0.2V	
	Power dissipation		1.2mW	
	Operate voltage	Typ.	1.7V	1.8V
		Max.	2.5V	2.5V
	Turn off voltag	Min.	0.5V	0.5V
Typ.		1.5V	1.4V	
Input current	Typ.	0.09mA (V <sub>IN</sub> = 5V)		
	Max.	0.2mA (V <sub>IN</sub> = 5V)		
Turn on time	Typ.	0.12ms (V <sub>IN</sub> = 5V)	0.06ms (V <sub>IN</sub> = 5V)	
	Max.	0.5ms (V <sub>IN</sub> = 5V)	0.5ms (V <sub>IN</sub> = 5V)	
Turn off time	Typ.	0.1ms (V <sub>IN</sub> = 5V)	0.06ms (V <sub>IN</sub> = 5V)	
	Max.	0.5ms (V <sub>IN</sub> = 5V)	0.5ms (V <sub>IN</sub> = 5V)	
Total power dissipation		250mW		
I/O isolation voltage		200Vrms		
Ambient temperature	Operating	-40 to +105°C -40 to +221°F		
	Storage	-40 to +125°C -40 to +257°F		
I/O capacitance	Typ.	1.2pF		
	Max.	3pF		
Initial I/O isolation resistance (Min.)		—		
Terminal layout and recommended PC board pattern				
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW		
Safety standards		—		
Mass (weight) (approx.)		0.007g .0002oz		
Packing style		Tape and reel packing		

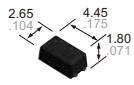

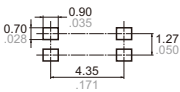
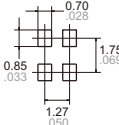
CC: Capacitor Coupled isolation **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		CC TSON CxR			
		1 Form A			
		AC/DC			
Appearance configuration *Standoff height included					
mm inch		<b>New</b>	<b>New</b>	<b>New</b>	
Part No.		AQY2C2R2P	AQY2C1R3P	AQY2C5R3P	
Output	Load voltage	Peak AC	60V	40V	100V
		DC	60V	40V	100V
	Continuous load current	1A			
		0.5A			
			0.3A	0.1A	0.12A
	Peak load current		0.9A	0.3A	0.3A
	Power dissipation		250mW		
	On resistance	Typ.	0.9Ω (VIN = 5V)	10.5Ω (VIN = 5V)	9Ω (VIN = 5V)
		Max.	1.5Ω (VIN = 5V)	15Ω (VIN = 5V)	14Ω (VIN = 5V)
	Output capacitance (Typ.)		27pF	1.2pF	5.8pF
Off state leakage current (Max.)		10nA			
Input	Input voltage	5.5V			
	Input reverse voltage	0.2V			
	Power dissipation	1.2mW			
	Operate voltage	Typ.	1.7V	2.2V	2.0V
		Max.	2.5V	2.5V	2.5V
	Turn off voltag	Min.	0.5V	0.5V	0.5V
		Typ.	1.4V	1.5V	1.5V
Input current	Typ.	0.09mA (VIN = 5V)			
	Max.	0.2mA (VIN = 5V)			
Turn on time	Typ.	0.08ms (VIN = 5V)	0.01ms (VIN = 5V)	0.03ms (VIN = 5V)	
	Max.	0.5ms (VIN = 5V)	0.1ms (VIN = 5V)	0.2ms (VIN = 5V)	
Turn off time	Typ.	0.1ms (VIN = 5V)	0.02ms (VIN = 5V)	0.04ms (VIN = 5V)	
	Max.	0.5ms (VIN = 5V)	0.2ms (VIN = 5V)	0.5ms (VIN = 5V)	
Total power dissipation		250mW			
I/O isolation voltage		200Vrms			
Ambient temperature	Operating	-40 to +105°C -40 to +221°F			
	Storage	-40 to +125°C -40 to +257°F			
I/O capacitance	Typ.	1.2pF			
	Max.	3pF			
Initial I/O isolation resistance (Min.)		—			
Terminal layout and recommended PC board pattern					
• Tolerance: ±0.1 ±.004	mm inch	TOP VIEW			
Safety standards		—			
Mass (weight) (approx.)		0.007g .0002oz			
Packing style		Tape and reel packing			

# PhotoMOS<sup>®</sup> Selector Chart

RF: Low on-resistance & low output capacitance



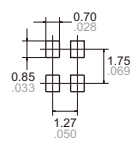
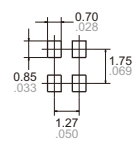
**GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		RF SSOP C×R3	RF VSSOP C×R3	
		1 Form A	1 Form A	
		AC/DC	AC/DC	
Appearance configuration *Standoff height included				
mm inch				
Part No.		AQY221N5V	AQY221N5T	
Load voltage	Peak AC	20V	20V	
	DC	20V	20V	
Continuous load current	1A			
	0.5A			
Peak load current		0.18A	0.18A	
Power dissipation		250mW	250mW	
On resistance	Typ.	2.8Ω	2.8Ω	
	Max.	4.5Ω	4.5Ω	
Output capacitance (Typ.)		1.1pF	1.1pF	
Off state leakage current (Max.)		10nA	10nA	
Input	LED forward current	50mA	50mA	
	LED reverse voltage	5V	5V	
	Peak forward current	1A	1A	
	Power dissipation	75mW	75mW	
	LED operate current	Typ.	0.8mA	0.7mA
		Max.	3mA	3mA
LED turn off current	Min.	0.2mA	0.2mA	
	Typ.	0.7mA	0.6mA	
LED dropout voltage	Typ.	1.35V (1.14V at I <sub>F</sub> = 5mA)	1.14V (1.35V at I <sub>F</sub> = 50mA)	
	Max.	1.5V	1.5V	
Turn on time	Typ.	0.02ms	0.02ms	
	Max.	0.2ms	0.2ms	
Turn off time	Typ.	0.01ms	0.01ms	
	Max.	0.2ms	0.2ms	
Total power dissipation		300mW	300mW	
I/O isolation voltage		1,500Vrms	200Vrms	
Ambient temperature	Operating	-40 to +85°C -40 to +185°F	-40 to +85°C -40 to +185°F	
	Storage	-40 to +100°C -40 to +212°F	-40 to +100°C -40 to +212°F	
I/O capacitance	Typ.	0.8pF	0.4pF	
	Max.	1.5pF	1.5pF	
Initial I/O isolation resistance (Min.)		1,000MΩ	—	
Terminal layout and recommended PC board pattern				
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW	TOP VIEW	
Safety standards		—	—	
Mass (weight) (approx.)		0.064g .002oz	0.026g .001oz	
Packing style		Tape and reel packing*	Tape and reel packing	

\* Packing quantity of 1,000 pieces is possible.



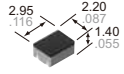
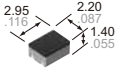
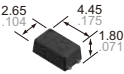
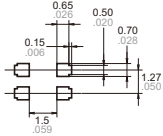
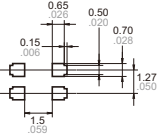
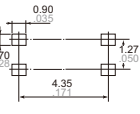
RF: Low on-resistance & low output capacitance GU GE CC RF HE HF HS PD Power

Product name		RF VSSOP C×R5		RF VSSOP C×R10		
		1 Form A		1 Form A		
		AC/DC		AC/DC		
Appearance configuration *Standoff height included						
		mm inch		mm inch		
Part No.		AQY221N3T	AQY221R6T	AQY221R2T	AQY221N2T	
Output	Load voltage	Peak AC	25V	30V	40V	
		DC	25V	30V	40V	
	Continuous load current	1A	0.15A	0.8A	0.25A	0.12A
		0.5A				
	Peak load current		—	1.5A	0.75A	—
	Power dissipation		250mW	250mW	250mW	250mW
	On resistance	Typ.	5.5Ω	0.18Ω	0.8Ω	9.5Ω
		Max.	7.5Ω	0.35Ω	1.25Ω	12.5Ω
	Output capacitance (Typ.)		1.1pF	37.5pF	14pF	1.1pF
	Off state leakage current (Max.)		10nA	10nA	10nA	10nA
Input	LED forward current		50mA	50mA	50mA	
	LED reverse voltage		5V	5V	5V	
	Peak forward current		1A	1A	1A	
	Power dissipation		75mW	75mW	75mW	
	LED operate current	Typ.	0.7mA	0.5mA	0.5mA	0.7mA
		Max.	3mA	3mA	3mA	3mA
	LED turn off current	Min.	0.2mA	0.1mA	0.1mA	0.2mA
Typ.		0.6mA	0.4mA	0.4mA	0.6mA	
LED dropout voltage	Typ.	1.14V	1.14V	1.14V	1.14V	
	Max.	1.5V	1.5V	1.5V	1.5V	
Turn on time	Typ.	0.01ms	0.1ms	0.1ms	0.01ms	
	Max.	0.2ms	0.5ms	0.5ms	0.2ms	
Turn off time	Typ.	0.03ms	0.06ms	0.06ms	0.03ms	
	Max.	0.2ms	0.2ms	0.2ms	0.2ms	
Total power dissipation		300mW	300mW	300mW	300mW	
I/O isolation voltage		200Vrms	200Vrms	200Vrms	200Vrms	
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F		
	Storage	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F		
I/O capacitance	Typ.	0.4pF	0.4pF	0.4pF	0.4pF	
	Max.	1.5pF	1.5pF	1.5pF	1.5pF	
Initial I/O isolation resistance (Min.)		—	—	—	—	
Terminal layout and recommended PC board pattern						
	• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW			
Safety standards			—			
Mass (weight) (approx.)	0.026g .001oz		0.026g .001oz			
Packing style	Tape and reel packing		Tape and reel packing			

# PhotoMOS<sup>®</sup> Selector Chart

RF: Low on-resistance & low output capacitance

**GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		RF SON C×R5	RF SON C×R10		RF SSOP C×R5	
		1 Form A	1 Form A		1 Form A	
		AC/DC	AC/DC		AC/DC	
Appearance configuration *Standoff height included						
mm inch						
Part No.		AQY221N3M	AQY221R2M	AQY221N2M	AQY221N3V	
Output	Load voltage	Peak AC	25V	40V	40V	25V
		DC	25V	40V	40V	25V
	Continuous load current	1A	-----			
		0.5A	-----			
	Peak load current		0.15A	0.25A	0.12A	0.15A
	Power dissipation		250mW	250mW		250mW
	On resistance	Typ.	5.5Ω	0.8Ω	9.5Ω	5.5Ω
		Max.	7.5Ω	1.25Ω	12.5Ω	7.5Ω
	Output capacitance (Typ.)		1.1pF	14pF	1.1pF	1pF
	Off state leakage current (Max.)		10nA	10nA		10nA
Input	LED forward current		50mA	50mA		50mA
	LED reverse voltage		5V	5V		5V
	Peak forward current		1A	1A		1A
	Power dissipation		75mW	75mW		75mW
	LED operate current	Typ.	1mA	0.8mA	1mA	1mA
		Max.	3mA	3mA	3mA	3mA
	LED turn off current	Min.	0.2mA	0.1mA	0.2mA	0.2mA
		Typ.	0.9mA	0.7mA	0.9mA	0.9mA
LED dropout voltage		Typ. 1.35V (1.14V at I <sub>F</sub> = 5mA) Max. 1.5V	1.35V (1.14V at I <sub>F</sub> = 5mA) 1.5V		1.35V (1.14V at I <sub>F</sub> = 5mA) 1.5V	
Turn on time		Typ. 0.02ms Max. 0.2ms	0.2ms 0.5ms	0.02ms 0.2ms	0.02ms 0.2ms	
Turn off time		Typ. 0.02ms Max. 0.2ms	0.04ms 0.2ms	0.02ms 0.2ms	0.02ms 0.2ms	
Total power dissipation		300mW	300mW		300mW	
I/O isolation voltage		200Vrms	200Vrms		1,500Vrms	
Ambient temperature	Operating	-40 to +85°C -40 to +185°F	-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F	
	Storage	-40 to +100°C -40 to +212°F	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F	
I/O capacitance	Typ.	0.8pF	0.8pF		0.8pF	
	Max.	1.5pF	1.5pF		1.5pF	
Initial I/O isolation resistance (Min.)		—	—		1,000MΩ	
Terminal layout and recommended PC board pattern						
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW	TOP VIEW	TOP VIEW		
Safety standards		—				
Mass (weight) (approx.)		0.024g .001oz	0.024g .001oz		0.064g .002oz	
Packing style		Tape and reel packing*	Tape and reel packing*		Tape and reel packing*	

\* Packing quantity of 1,000 pieces is possible.

RF: Low on-resistance & low output capacitance **GU GE CC RF HE HF HS PD Power**

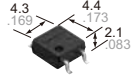
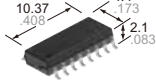
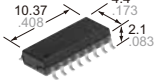
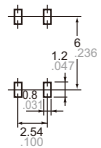
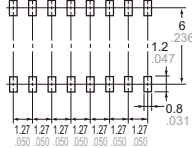
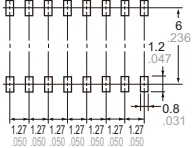
Product name		RF SSOP C×R10				RF SSOP C×R10 Voltage-sensitive		
		1 Form A				1 Form A		
		AC/DC				AC/DC		
Appearance configuration *Standoff height included  mm inch								
		Part No.		AQY221R2V	AQY221R4V	AQY221N2V	AQY221R6V	AQY221FR2V
Load voltage	Peak AC	40V	40V	40V	30V	40V	40V	
	DC	40V	40V	40V	30V	40V	40V	
Output	Continuous load current	1A			1A			
		0.5A	0.25A	0.5A	0.12A	1.5A	0.25A	0.12A
	Peak load current	0.75A	1A	0.3A	1.5A	0.75A	0.2A	
	Power dissipation	250mW				250mW		
On resistance	Typ.	0.75Ω	0.55Ω	9.5Ω	0.18Ω	0.75Ω	9.5Ω	
	Max.	1.25Ω	1Ω	12.5Ω	0.35Ω	1.25Ω	12.5Ω	
Output capacitance (Typ.)		12.5pF	24pF	1pF	37.5pF	12.5pF	1pF	
Off state leakage current (Max.)		10nA				10nA		
Input	LED forward current		50mA				Input voltage: 6V	
	LED reverse voltage		5V				Input reverse voltage: 5V	
	Peak forward current		1A				—	
	Power dissipation		75mW				65mW	
	LED operate current	Typ.	0.9mA		1mA	0.7mA	Operate voltage: 1.3V	
		Max.	3mA		3mA	3mA	4V	
	LED turn off current	Min.	0.1mA		0.2mA	0.1mA	Turn off voltage: 0.8V	
Typ.		0.8mA		0.9mA	0.6mA	1.3V		
LED dropout voltage	Typ.	1.35V (1.14V at I <sub>F</sub> = 5mA)				Input current (Typ.): 8.5mA (V <sub>IN</sub> = 5V)		
	Max.	1.5V						
Turn on time	Typ.	0.1ms	0.25ms	0.02ms	0.2ms	0.05ms	0.01ms	
	Max.	0.5ms	0.75ms	0.5ms	0.5ms	0.5ms	0.5ms	
Turn off time	Typ.	0.08ms		0.02ms	0.07ms	0.06ms	0.03ms	
	Max.	0.2ms		0.2ms	0.2ms	0.2ms	0.2ms	
Total power dissipation		300mW				300mW		
I/O isolation voltage		1,500Vrms				500Vrms		
Ambient temperature	Operating	-40 to +85°C -40 to +185°F				-40 to +85°C -40 to +185°F		
	Storage	-40 to +100°C -40 to +212°F				-40 to +100°C -40 to +212°F		
I/O capacitance	Typ.	0.8pF				0.8pF		
	Max.	1.5pF				1.5pF		
Initial I/O isolation resistance (Min.)		1,000MΩ				1,000MΩ		
Terminal layout and recommended PC board pattern  • Tolerance: ±0.1 ±.004 mm inch								
		TOP VIEW				TOP VIEW		
Safety standards		—						
Mass (weight) (approx.)		0.064g .002oz				0.064g .002oz		
Packing style		Tape and reel packing*				Tape and reel packing*		

\* Packing quantity of 1,000 pieces is possible.

# PhotoMOS® Selector Chart

RF: Low on-resistance & low output capacitance

**GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		RF SOP C×R10		RF SOP C×R10		RF SOP C×R10 Voltage-sensitive	
		1 Form A		4 Form A		4 Form A	
		AC/DC		AC/DC		AC/DC	
Appearance configuration *Standoff height included							
mm inch							
Part No.		AQY221R2S	AQY221N2S	AQS221R2S	AQS221N2S	AQS221FR2S	AQS221FN2S
Load voltage	Peak AC	40V	40V	40V	40V	40V	40V
	DC	40V	40V	40V	40V	40V	40V
Continuous load current	1A						
	0.5A						
Peak load current		0.75A	0.3A	0.2A	0.12A	0.2A	0.12A
Power dissipation		300mW		600mW		600mW	
On resistance	Typ.	0.8Ω	9.5Ω	0.8Ω	9.5Ω	0.75Ω	9.5Ω
	Max.	1.25Ω	12.5Ω	1.25Ω	12.5Ω	1.25Ω	12.5Ω
Output capacitance (Typ.)		13pF	1pF	13pF	1pF	12.5pF	1pF
Off state leakage current (Max.)		10nA		10nA		10nA	
LED forward current	Typ.	50mA	50mA	50mA	50mA	Input voltage: 6V	
	Max.	50mA	50mA	50mA	50mA	Input reverse voltage: 5V	
LED reverse voltage		5V		5V		—	
Peak forward current		1A		1A		—	
Power dissipation		75mW		75mW		260mW (65mW per channel)	
LED operate current	Typ.	0.5mA	0.9mA	0.5mA	0.9mA	Operate voltage: 1.3V	
	Max.	3mA	3mA	3mA	3mA	4V	
LED turn off current	Min.	0.1mA	0.2mA	0.1mA	0.1mA	Turn off voltage: 0.8V	
	Typ.	0.4mA	0.85mA	0.4mA	0.85mA	1.3V	
LED dropout voltage		Typ. 1.25V (1.14V at I <sub>F</sub> = 5mA) Max. 1.5V		Typ. 1.25V (1.14V at I <sub>F</sub> = 5mA) Max. 1.5V		Input current (Typ.): 8.5mA (V <sub>IN</sub> = 5V)	
Turn on time	Typ.	0.1ms	0.03ms	0.15ms	0.03ms	0.07ms	0.02ms
	Max.	0.5ms	0.5ms	0.5ms	0.2ms	0.5ms	0.5ms
Turn off time	Typ.	0.06ms	0.03ms	0.06ms	0.03ms	0.07ms	0.02ms
	Max.	0.2ms	0.2ms	0.2ms	0.2ms	0.2ms	0.2ms
Total power dissipation		350mW		650mW		650mW	
I/O isolation voltage		500Vrms	1,500Vrms	500Vrms	500Vrms	500Vrms	
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F	
	Storage	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F	
I/O capacitance	Typ.	0.8pF	0.8pF	0.8pF	0.8pF	0.8pF	
	Max.	1.5pF	1.5pF	1.5pF	1.5pF	1.5pF	
Initial I/O isolation resistance (Min.)		1,000MΩ		1,000MΩ		1,000MΩ	
Terminal layout and recommended PC board pattern							
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW		TOP VIEW		TOP VIEW	
Safety standards		—		—		—	
Mass (weight) (approx.)		0.084g .003oz		0.195g .007oz		0.195g .007oz	
Packing style		Tube packing, Tape and reel packing					

RF: Low on-resistance & low output capacitance **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		RF VSSOP C×R		RF SSOP C×R			RF SOP C×R				
		1 Form A		1 Form A			1 Form A				
		AC/DC		AC/DC			AC/DC				
Appearance configuration *Standoff height included											
mm inch											
Part No.		AQY222R2T	AQY225R3T	AQY222R2V	AQY225R2V	AQY225R3V	AQY222R1S	AQY225R1S	AQY225R2S		
Load voltage	Peak AC	60V	100V	60V	80V	100V	60V	80V	80V		
	DC	60V	100V	60V	80V	100V	60V	80V	80V		
Output	Continuous load current		1A			0.5A			0.1A		
	Peak load current		1.2A	0.3A	1.2A	0.3A	0.3A	1A	0.7A	0.45A	
	Power dissipation		250mW		250mW			300mW			
	On resistance	Typ.	0.8Ω	8.8Ω	0.8Ω	10.5Ω	8.8Ω	0.8Ω	0.8Ω	10.5Ω	
		Max.	1.25Ω	14Ω	1.25Ω	15Ω	14Ω	1.2Ω	1.2Ω	15Ω	
	Output capacitance (Typ.)		27pF	5.8pF	27pF	4.5pF	5.8pF	24.5pF	37.5pF	4.5pF	
	Off state leakage current (Max.)		10nA		10nA			10nA			
Input	LED forward current		50mA			50mA			50mA		
	LED reverse voltage		5V			5V			5V		
	Peak forward current		1A			1A			1A		
	Power dissipation		75mW		75mW			75mW			
	LED operate current	Typ.	0.4mA		0.5mA			0.5mA			
		Max.	3mA		3mA			3mA			
	LED turn off current	Min.	0.1mA		0.1mA			0.1mA			
Typ.		0.35mA		0.45mA			0.45mA				
LED dropout voltage	Typ.	1.14V (1.35V at I <sub>F</sub> = 50mA)		1.32V (1.14V at I <sub>F</sub> = 5mA)			1.32V (1.14V at I <sub>F</sub> = 5mA)				
	Max.	1.5V		1.5V			1.5V				
Turn on time	Typ.	0.12ms	0.04ms	0.15ms	0.05ms		0.15ms	0.25ms	0.05ms		
	Max.	0.5ms	0.5ms	0.5ms			0.5ms	0.75ms	0.5ms		
Turn off time	Typ.	0.08ms	0.05ms	0.08ms	0.05ms		0.06ms	0.08ms	0.05ms		
	Max.	0.2ms	0.2ms	0.2ms			0.2ms	0.2ms	0.2ms		
Total power dissipation		300mW		300mW			350mW				
I/O isolation voltage		200Vrms		1,500Vrms			1,500Vrms				
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F			-40 to +85°C -40 to +185°F				
	Storage	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F			-40 to +100°C -40 to +212°F				
I/O capacitance	Typ.	0.4pF		0.8pF			0.8pF				
	Max.	1.5pF		1.5pF			1.5pF				
Initial I/O isolation resistance (Min.)		—		1,000MΩ			1,000MΩ				
Terminal layout and recommended PC board pattern											
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW		TOP VIEW			TOP VIEW				
Safety standards		—		—			UL/C-UL		—		
Mass (weight) (approx.)		0.026g .001oz		0.064g .002oz			0.084g .003oz				
Packing style		Tape and reel packing		Tape and reel packing*			Tube packing, Tape and reel packing				

\* Packing quantity of 1,000 pieces is possible.

# PhotoMOS® Selector Chart

RF: Low on-resistance & low output capacitance **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		RF SOP CxR	RF SOP Low on-resistance		RF Low on-resistance		
		2 Form A	1 Form A		1 Form A		
		AC/DC	AC/DC		AC/DC		
Appearance configuration *Standoff height included							
mm inch							
Part No.		AQW223R2S	AQV227NS	AQV224NS	AQV227N	AQV224N	
Load voltage	Peak AC	250V	200V	400V	200V	400V	
	DC	250V	200V	400V	200V	400V	
Continuous load current *6-pin type: in case of A connection	1A						
	0.5A						
Peak load current		0.14A	0.05A	0.04A	0.07A	0.05A	
Power dissipation		600mW	450mW		360mW		
On resistance *6-pin type: in case of A connection	Typ.	11Ω	30Ω	70Ω	30Ω	70Ω	
	Max.	15Ω	50Ω	100Ω	50Ω	100Ω	
Output capacitance (Typ.)		33pF	10pF		10pF		
Off state leakage current (Max.)		10nA	10nA		10nA		
Input	LED forward current	50mA	50mA		50mA		
	LED reverse voltage	5V	5V		5V		
	Peak forward current	1A	1A		1A		
	Power dissipation	75mW	75mW		75mW		
	LED operate current	Typ.	0.5mA	0.7mA		0.9mA	
		Max.	3mA	3mA		3mA	
	LED turn off current	Min.	0.1mA	0.4mA		0.4mA	
Typ.		0.45mA	0.65mA		0.85mA		
LED dropout voltage	Typ.	1.32V (1.14V at I <sub>F</sub> = 5mA)	1.25V (1.14V at I <sub>F</sub> = 5mA)		1.25V (1.14V at I <sub>F</sub> = 5mA)		
	Max.	1.5V	1.5V		1.5V		
Turn on time	Typ.	0.15ms	0.12ms	0.1ms	0.2ms		
	Max.	0.5ms	0.5ms	0.5ms	0.5ms		
Turn off time	Typ.	0.05ms	0.05ms		0.08ms		
	Max.	0.2ms	0.2ms		0.2ms		
Total power dissipation		650mW	500mW		410mW		
I/O isolation voltage		1,500Vrms	1,500Vrms		1,500Vrms		
Ambient temperature	Operating	-40 to +85°C -40 to +185°F	-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F		
	Storage	-40 to +100°C -40 to +212°F	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F		
I/O capacitance	Typ.	0.8pF	0.8pF		0.8pF		
	Max.	1.5pF	1.5pF		1.5pF		
Initial I/O isolation resistance (Min.)		1,000MΩ	1,000MΩ		1,000MΩ		
Terminal layout and recommended PC board pattern					<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Through hole terminal</p> <p>BOTTOM VIEW</p> </div> <div style="text-align: center;"> <p>Surface mount terminal</p> <p>TOP VIEW</p> </div> </div>		
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW	TOP VIEW		TOP VIEW		
Safety standards		—	UL/C-UL		UL/C-UL		
Mass (weight) (approx.)		0.195g .007oz	0.125g .004oz		0.453g .016oz		
Packing style		Tube packing, Tape and reel packing					

RF: Low on-resistance & low output capacitance **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		RF SOP Low on-resistance		RF Low on-resistance		RF SOP CxR		
		2 Form A		2 Form A		4 Form A		
		AC/DC		AC/DC		AC/DC		
Appearance configuration *Standoff height included								
mm inch								
Part No.		AQW227NS		AQW227N	AQW224N	AQS225R2S		
Load voltage	Peak AC	200V		200V	400V	80V		
	DC	200V		200V	400V	80V		
Continuous load current	1A							
	0.5A							
Peak load current		0.15A		0.15A	0.12A	0.2A		
Power dissipation		600mW		800mW		600mW		
On resistance	Typ.	30Ω		30Ω	70Ω	10.5Ω		
	Max.	50Ω		50Ω	100Ω	15Ω		
Output capacitance (Typ.)		10pF		10pF		4.5pF		
Off state leakage current (Max.)		10nA		10nA		10nA		
Input	LED forward current		50mA		50mA		50mA	
	LED reverse voltage		5V		5V		5V	
	Peak forward current		1A		1A		1A	
	Power dissipation		75mW		75mW		75mW	
	LED operate current	Typ.	0.7mA		0.9mA		0.9mA	
		Max.	3mA		3mA		3mA	
	LED turn off current	Min.	0.4mA		0.4mA		0.3mA	
Typ.		0.65mA		0.8mA		0.85mA		
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)		1.25V (1.14V at I <sub>F</sub> = 5mA)		1.25V (1.14V at I <sub>F</sub> = 5mA)		
	Max.	1.5V		1.5V		1.5V		
Turn on time	Typ.	0.25ms		0.2ms		0.04ms		
	Max.	0.5ms		0.5ms		0.3ms		
Turn off time	Typ.	0.08ms		0.08ms		0.07ms		
	Max.	0.2ms		0.2ms		0.2ms		
Total power dissipation		650mW		850mW		650mW		
I/O isolation voltage		1,500Vrms		1,500Vrms		1,500Vrms		
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F		
	Storage	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F		
I/O capacitance	Typ.	0.8pF		0.8pF		0.8pF		
	Max.	1.5pF		1.5pF		1.5pF		
Initial I/O isolation resistance (Min.)		1,000MΩ		1,000MΩ		1,000MΩ		
Terminal layout and recommended PC board pattern								
• Tolerance: ±0.1 ±.004 mm inch								
Safety standards		UL/C-UL		UL/C-UL		—		
Mass (weight) (approx.)		0.195g .007oz		0.5g .018oz		0.195g .007oz		
Packing style				Tube packing, Tape and reel packing				

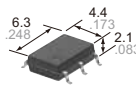
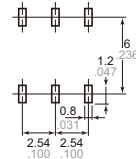
# PhotoMOS® Selector Chart

HE: Low on-resistance & Economical **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		HE											
		1 Form A											
		AC/DC											
Appearance configuration *Standoff height included													
Part No.		AQV251	AQV252	AQV255	AQV257	AQV253	AQV254	AQV259	AQV258	AQV253H	AQV254H	AQV256H	
Load voltage	Peak AC	40V	60V	100V	200V	250V	400V	1,000V	1,500V	250V	400V	600V	
	DC	40V	60V	100V	200V	250V	400V	1,000V	1,500V	250V	400V	600V	
Output	Continuous load current *6-pin type: in case of A connection												
	Peak load current	1.8A	1.5A	1.0A	0.75A	0.6A	0.5A	0.09A	0.06A	0.6A	0.5A	0.4A	
	Power dissipation	360mW											
	On resistance *6-pin type: in case of A connection	Typ.	0.6Ω	0.74Ω	1.8Ω	2.6Ω	5.5Ω	12.4Ω	85Ω	345Ω	5.5Ω	12.4Ω	20Ω
		Max.	1Ω	1.4Ω	2.5Ω	4Ω	8Ω	16Ω	200Ω	500Ω	8Ω	16Ω	30Ω
	Output capacitance (Typ.)		350pF			170pF			80pF		170pF		70pF
	Off state leakage current (Max.)		1μA						10μA		1μA		
Input	LED forward current	50mA											
	LED reverse voltage	5V											
	Peak forward current	1A											
	Power dissipation	75mW											
	LED operate current	Typ.	0.9mA									1.4mA	
		Max.	3mA									3mA	
	LED turn off current	Min.	0.4mA									0.4mA	
	Typ.	0.8mA									1.3mA		
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)											
	Max.	1.5V											
Turn on time	Typ.	1.7ms	1.4ms	0.9ms	1.5ms	0.8ms		0.6ms	0.35ms	2.4ms	1.8ms	1.2ms	
	Max.	3ms	3ms	2ms	3ms	2ms		1ms	1ms	4ms	3ms	3ms	
Turn off time	Typ.	0.07ms		0.09ms	0.1ms	0.06ms	0.05ms	0.04ms	0.04ms	0.06ms	0.05ms	0.06ms	
	Max.	0.2ms		0.2ms	0.2ms	0.2ms	0.2ms	0.2ms	0.2ms	0.2ms	0.2ms	0.2ms	
Total power dissipation		410mW											
I/O isolation voltage		1,500Vrms							5,000Vrms				
Ambient temperature	Operating	-40 to +85°C -40 to +185°F											
	Storage	-40 to +100°C -40 to +212°F											
I/O capacitance	Typ.	1.3pF											
	Max.	3pF											
Initial I/O isolation resistance (Min.)		1,000MΩ											
Terminal layout and recommended PC board pattern													
		• Tolerance: ±0.1 ±.004 mm inch BOTTOM VIEW TOP VIEW											
Safety standards		UL/C-UL						UL/C-UL, VDE		UL/C-UL, BSI		UL/C-UL, VDE	
Mass (weight) (approx.)		0.453g .016oz											
Packing style		Tube packing, Tape and reel packing											



HE: Low on-resistance & Economical **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

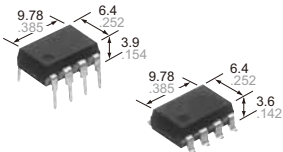
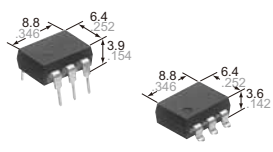
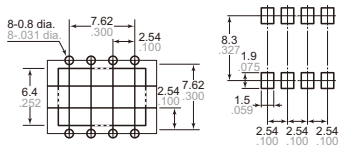
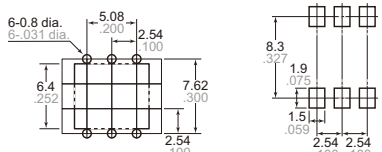
Product name		HE SOP High Capacity				
		1 Form A (6 pins)				
		AC/DC				
Appearance configuration *Standoff height included						
Part No.		AQV252G2S	<b>New</b> AQV252G3S	AQV255GS	<b>New</b> AQV255G3S	
Output	Load voltage	Peak AC	50V	60V	80V	100V
		DC	50V	60V	80V	100V
	Continuous load current *6-pin type: in case of A connection	3A	3A	3.3A	1.25A	2.2A
		2A				
		1A				
	Peak load current	6A	10A	3A	6A	
	Power dissipation	450mW				
	On resistance *6-pin type: in case of A connection	Typ.	0.04Ω	0.033Ω	0.09Ω	0.07Ω
		Max.	0.07Ω	0.06Ω	0.15Ω	0.12Ω
	Output capacitance (Typ.)	360pF, 510pF, 300pF, 430pF				
Off state leakage current (Max.)	1μA					
Input	LED forward current	50mA				
	LED reverse voltage	5V				
	Peak forward current	1A				
	Power dissipation	75mW				
	LED operate current	Typ.	0.6mA	0.5mA	0.5mA	0.5mA
		Max.	3mA	3mA	3mA	3mA
	LED turn off current	Min.	0.2mA	0.2mA	0.2mA	0.2mA
		Typ.	0.5mA	0.4mA	0.4mA	0.4mA
LED dropout voltage	Typ.	1.32V (1.14V at I <sub>F</sub> = 5mA)				
	Max.	1.5V				
Turn on time	Typ.	1.5ms	1.8ms	1.3ms	1.8ms	
	Max.	5.0ms	5.0ms	5.0ms	5.0ms	
Turn off time	Typ.	0.08ms	0.15ms	0.1ms	0.15ms	
	Max.	0.5ms	0.5ms	0.5ms	0.5ms	
Total power dissipation	500mW					
I/O isolation voltage	1,500Vrms					
Ambient temperature	Operating	-40 to +85°C -40 to +185°F				
	Storage	-40 to +100°C -40 to +212°F				
I/O capacitance	Typ.	0.8pF				
	Max.	1.5pF				
Initial I/O isolation resistance (Min.)	1,000MΩ					
Terminal layout and recommended PC board pattern						
• Tolerance: ±0.1 ±.004 mm inch		TOP VIEW				
Safety standards	UL/C-UL, VDE		UL/C-UL	UL/C-UL, VDE	UL/C-UL	
Mass (weight) (approx.)	0.125g .004oz					
Packing style	Tube packing, Tape and reel packing					

# PhotoMOS<sup>®</sup> Selector Chart

HE: Low on-resistance & Economical **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		HE High Capacity				
		1 Form A				
		AC/DC				
Appearance configuration *Standoff height included						
Part No.		AQV251G	AQV252G	<b>New</b> AQV252G3	<b>New</b> AQV255G3	
Output	Load voltage	Peak AC	30V	60V	60V	100V
		DC	30V	60V	60V	100V
	Continuous load current *6-pin type: in case of A connection	3A	3.5A		3.5A	
		2A		2.5A		2.4A
		1A				
	Peak load current		6.0A	6.0A	10A	7.0A
	Power dissipation		600mW			
	On resistance *6-pin type: in case of A connection	Typ.	0.035Ω	0.08Ω	0.033Ω	0.07Ω
		Max.	0.08Ω	0.12Ω	0.06Ω	0.12Ω
	Output capacitance (Typ.)		330pF	240pF	510pF	430pF
Off state leakage current (Max.)		1μA				
Input	LED forward current	50mA				
	LED reverse voltage	5V				
	Peak forward current	1A				
	Power dissipation	75mW				
	LED operate current	Typ.	0.55mA	0.5mA	0.5mA	0.5mA
		Max.	3mA	3mA	3mA	3mA
	LED turn off current	Min.	0.2mA			
Typ.		0.4mA				
LED dropout voltage	Typ.	1.32V (1.14V at I <sub>F</sub> = 5mA)				
	Max.	1.5V				
Turn on time	Typ.	1.8ms				
	Max.	5ms				
Turn off time	Typ.	0.1ms	0.25ms	0.15ms	0.15ms	
	Max.	0.5ms	0.5ms	0.5ms	0.5ms	
Total power dissipation		650mW				
I/O isolation voltage		1,500Vrms				
Ambient temperature	Operating	-40 to +85°C -40 to +185°F				
	Storage	-40 to +100°C -40 to +212°F				
I/O capacitance	Typ.	0.8pF				
	Max.	1.5pF				
Initial I/O isolation resistance (Min.)		1,000MΩ				
Terminal layout and recommended PC board pattern						
• Tolerance: ±0.1 ±.004	mm inch					
Safety standards		UL/C-UL, VDE	UL/C-UL	UL/C-UL	UL/C-UL, VDE	
Mass (weight) (approx.)		0.453g .016oz				
Packing style		Tube packing, Tape and reel packing				

HE: Low on-resistance & Economical **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		HE					
		2 Form A		1 Form B			
		AC/DC		AC/DC			
Appearance configuration *Standoff height included							
mm inch							
Part No.		AQW254		AQV453	AQV454	AQV454H	
Load voltage	Peak AC	400V		250V	400V	400V	
	DC	400V		250V	400V	400V	
Output	Continuous load current *6-pin type: in case of A connection		1A		0.5A		
			0.12A		0.2A	0.15A	0.15A
	Peak load current		0.36A		0.6A	0.5A	
	Power dissipation		800mW		360mW		
	On resistance *6-pin type: in case of A connection		Typ.	10.2Ω	5.5Ω	11Ω	
			Max.	16Ω	8Ω	16Ω	
	Output capacitance (Typ.)		170pF		350pF	170pF	
Off state leakage current (Max.)		1μA		1μA		10μA	
Input	LED forward current		50mA		50mA		
	LED reverse voltage		5V		5V		
	Peak forward current		1A		1A		
	Power dissipation		75mW		75mW		
	LED operate current		Typ.	0.9mA	1mA	0.9mA	1.4mA
			Max.	3mA	3mA	3mA	3mA
	LED turn off current		Min.	0.4mA	0.4mA	0.4mA	0.4mA
		Typ.	0.8mA	0.9mA	0.8mA	1.3mA	
LED dropout voltage		Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)	1.25V (1.14V at I <sub>F</sub> = 5mA)			
		Max.	1.5V	1.5V			
Turn on time		Typ.	0.8ms	1.52ms	1.2ms	1.8ms	
		Max.	2ms	3ms	2ms	3ms	
Turn off time		Typ.	0.04ms	0.4ms	0.36ms	0.4ms	
		Max.	0.2ms	1ms	1ms	1ms	
Total power dissipation		850mW		410mW			
I/O isolation voltage		1,500Vrms		1,500Vrms		5,000Vrms	
Ambient temperature		Operating		-40 to +85°C -40 to +185°F			
		Storage		-40 to +100°C -40 to +212°F			
I/O capacitance		Typ.	0.8pF	1.3pF			
		Max.	1.5pF	3pF			
Initial I/O isolation resistance (Min.)		1,000MΩ		1,000MΩ			
Terminal layout and recommended PC board pattern		Through hole terminal    Surface mount terminal		Through hole terminal    Surface mount terminal			
• Tolerance: ±0.1 ±0.04 mm inch							
		BOTTOM VIEW    TOP VIEW		BOTTOM VIEW    TOP VIEW			
Safety standards		UL/C-UL		UL/C-UL	UL/C-UL, BSI		
Mass (weight) (approx.)		0.5g .018oz		0.453g .016oz			
Packing style		Tube packing, Tape and reel packing					

# PhotoMOS® Selector Chart

HE: Low on-resistance & Economical

**GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		HE	
		2 Form B	1 Form A & 1 Form B
Appearance configuration *Standoff height included			
Part No.		AQW454	AQW654
Load voltage	Peak AC	400V	400V
	DC	400V	400V
Output	Continuous load current	1A	
		0.5A	
	Peak load current	0.36A	0.36A
	Power dissipation	800mW	800mW
On resistance	Typ.	11Ω	11Ω
	Max.	16Ω	16Ω
Output capacitance (Typ.)		170pF	170pF
Off state leakage current (Max.)		1μA	1μA
Input	LED forward current		50mA
	LED reverse voltage		5V
	Peak forward current		1A
	Power dissipation		75mW
	LED operate current	Typ.	0.9mA
		Max.	3mA
	LED turn off current	Min.	0.4mA
		Typ.	0.8mA
LED dropout voltage	Typ.	1.25V (1.14V at I <sub>F</sub> = 5mA)	
	Max.	1.5V	
Turn on time	Typ.	1.2ms	
	Max.	2ms	
Turn off time	Typ.	0.36ms	
	Max.	1ms	
Total power dissipation		850mW	
I/O isolation voltage		1,500Vrms	
Ambient temperature	Operating	-40 to +85°C -40 to +185°F	
	Storage	-40 to +100°C -40 to +212°F	
I/O capacitance	Typ.	0.8pF	
	Max.	1.5pF	
Initial I/O isolation resistance (Min.)		1,000MΩ	
Terminal layout and recommended PC board pattern	Through hole terminal	Surface mount terminal	
• Tolerance: ±0.1 ±.004 mm inch			
Safety standards		UL/C-UL	
Mass (weight) (approx.)		0.5g .018oz	
Packing style		Tube packing, Tape and reel packing	

HF: Low on-resistance **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		HF														
		1 Form A														
		DC				AC/DC										
Appearance configuration *Standoff height included																
Part No.		AQV101	AQV102	AQV103	AQV104	AQV201	AQV202	AQV203	AQV204							
Load voltage	Peak AC	—														
	DC	40V	60V	250V	400V	40V	60V	250V	400V							
Output	Continuous load current *6-pin type: in case of A connection															
		1A														
	0.5A															
	Peak load current	<table border="1"> <tr> <td>1.8A</td> <td>1.5A</td> <td>0.6A</td> <td>0.5A</td> <td>1.8A</td> <td>1.5A</td> <td>0.6A</td> <td>0.5A</td> </tr> </table>								1.8A	1.5A	0.6A	0.5A	1.8A	1.5A	0.6A
1.8A	1.5A	0.6A	0.5A	1.8A	1.5A	0.6A	0.5A									
Power dissipation	360mW															
On resistance *6-pin type: in case of A connection	Typ.	0.3Ω	0.37Ω	2.7Ω	6.3Ω	0.6Ω	0.74Ω	5.5Ω	12.4Ω							
	Max.	0.5Ω	0.7Ω	4Ω	8Ω	1Ω	1.4Ω	8Ω	16Ω							
Output capacitance (Typ.)	600pF		300pF		350pF		170pF									
Off state leakage current (Max.)	1μA															
Input	LED forward current	50mA														
	LED reverse voltage	10V														
	Peak forward current	1A														
	Power dissipation	150mW														
	LED operate current	Typ.	2.3mA				2.4mA									
		Max.	5mA				5mA									
	LED turn off current	Min.	0.8mA													
Typ.		2.2mA														
LED dropout voltage	Typ.	2.3V														
	Max.	3V														
Turn on time	Typ.	0.23ms	0.22ms	0.13ms	0.09ms	0.38ms	0.41ms	0.21ms	0.18ms							
	Max.	1ms	1ms	1ms	1ms	1ms	1ms	1ms	1ms							
Turn off time	Typ.	0.07ms			0.08ms			0.07ms								
	Max.	1ms			1ms			1ms								
Total power dissipation	410mW															
I/O isolation voltage	1,500Vrms															
Ambient temperature	Operating	-40 to +85°C -40 to +185°F														
	Storage	-40 to +100°C -40 to +212°F														
I/O capacitance	Typ.	1.3pF														
	Max.	3pF														
Initial I/O isolation resistance (Min.)	1,000MΩ															
Terminal layout and recommended PC board pattern	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Through hole terminal</p> <p>BOTTOM VIEW</p> </div> <div style="text-align: center;"> <p>Surface mount terminal</p> <p>TOP VIEW</p> </div> </div>															
• Tolerance: ±0.1 ±.004	mm inch															
Safety standards	UL/C-UL															
Mass (weight) (approx.)	0.453g .016oz															
Packing style	Tube packing, Tape and reel packing															

# PhotoMOS<sup>®</sup> Selector Chart

HS: High sensitivity **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		HS		HS SOP		
		1 Form A		1 Form A		
		AC/DC		AC/DC		
Appearance configuration *Standoff height included						
mm inch						
Part No.		AQV234		AQY232S	AQY230S	
				AQY234S		
Output	Load voltage	Peak AC	400V	60V	350V	400V
		DC	400V	60V	350V	400V
	Continuous load current *6-pin type: in case of A connection	1A				
		0.5A		0.5A		
			0.12A		0.12A	0.1A
	Peak load current		0.3A	1.5A	0.3A	0.24A
	Power dissipation		500mW		300mW	
	On resistance *6-pin type: in case of A connection	Typ.	30Ω	0.85Ω	19Ω	27Ω
		Max.	50Ω	2.5Ω	25Ω	35Ω
	Output capacitance (Typ.)		45pF	80pF	32pF	35pF
Off state leakage current (Max.)		1μA		1μA		
Input	LED forward current		50mA		50mA	
	LED reverse voltage		5V		5V	
	Peak forward current		1A		1A	
	Power dissipation		75mW		75mW	
	LED operate current	Typ.	0.31mA		0.35mA	
		Max.	0.5mA		0.5mA	
	LED turn off current	Min.	0.1mA		0.1mA	
Typ.		0.29mA		0.3mA		
LED dropout voltage	Typ.	1.25V (1.1V at I <sub>F</sub> = 2mA)		1.25V (1.1V at I <sub>F</sub> = 2mA)		
	Max.	1.5V		1.5V		
Turn on time	Typ.	0.89ms	1.5ms	1.2ms	0.8ms	
	Max.	2ms	5ms	5ms	5ms	
Turn off time	Typ.	0.22ms	0.15ms	0.1ms	0.1ms	
	Max.	1ms	2ms	2ms	2ms	
Total power dissipation		550mW		350mW		
I/O isolation voltage		1,500Vrms		1,500Vrms		
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		-40 to +85°C -40 to +185°F		
	Storage	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F		
I/O capacitance	Typ.	0.8pF		0.8pF		
	Max.	1.5pF		1.5pF		
Initial I/O isolation resistance (Min.)		1,000MΩ		1,000MΩ		
Terminal layout and recommended PC board pattern		Through hole terminal    Surface mount terminal 				
• Tolerance: ±0.1 ±.004	mm inch					
Safety standards		UL/C-UL		UL/C-UL, VDE		
Mass (weight) (approx.)		0.453g .016oz		0.084g .003oz		
Packing style		Tube packing, Tape and reel packing				

PD: Flat & power **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		PD			
		1 Form A			
		AC/DC			
Appearance configuration *Standoff height included					
Part No.		AQY272	AQY275	AQY277	AQY274
Load voltage	Peak AC	60V	100V	200V	400V
	DC	60V	100V	200V	400V
Output	Continuous load current	2A	1.3A	0.65A	0.35A
		1A			
		0.5A			
	Peak load current	6A	4A	2A	1A
Power dissipation		700mW			
On resistance	Typ.	0.11Ω	0.23Ω	0.7Ω	2.1Ω
	Max.	0.18Ω	0.34Ω	1.1Ω	3.2Ω
Output capacitance (Typ.)		1,400pF		600pF	
Off state leakage current (Max.)		10μA			
Input	LED forward current		50mA		
	LED reverse voltage		5V		
	Peak forward current		1A		
	Power dissipation		75mW		
	LED operate current	Typ.	1mA		
		Max.	3mA		
	LED turn off current	Min.	0.4mA		
Typ.		0.9mA			
LED dropout voltage	Typ.	1.25V (1.16V at I <sub>f</sub> = 10mA)			
	Max.	1.5V			
Turn on time	Typ.	2.46ms	2.4ms	1.12ms	1.65ms
	Max.	5ms	5ms	5ms	5ms
Turn off time	Typ.	0.22ms	0.21ms	0.1ms	0.08ms
	Max.	3ms	3ms	3ms	3ms
Total power dissipation		750mW			
I/O isolation voltage		2,500Vrms			
Ambient temperature	Operating	-40 to +85°C -40 to +185°F			
	Storage	-40 to +100°C -40 to +212°F			
I/O capacitance	Typ.	0.8pF			
	Max.	1.5pF			
Initial I/O isolation resistance (Min.)		1,000MΩ			
Terminal layout and recommended PC board pattern					
• Tolerance: ±0.1 ±.004 mm inch					
Safety standards		UL/C-UL, VDE			
Mass (weight) (approx.)		0.62g .022oz			
Packing style		Tube packing, Tape and reel packing			

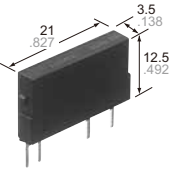
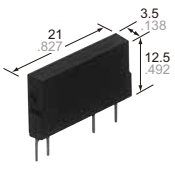
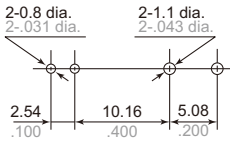
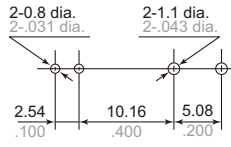
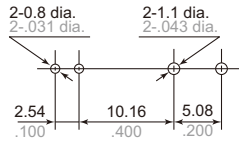
# PhotoMOS® Selector Chart

Power: Slim & power **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		Power								
		1 Form A								
		DC				AC/DC				
Appearance configuration *Standoff height included										
Part No.		AQZ102	AQZ105	AQZ107	AQZ104	AQZ202	AQZ205	AQZ207	AQZ204	
Load voltage	Peak AC	—								
	DC	60V	100V	200V	400V	60V	100V	200V	400V	
Continuous load current	3A	4A	2.6A	1.3A	0.7A	3A	2A	1A	0.5A	
	1A									
Peak load current		9.0A	6.0A	3.0A	1.5A	9.0A	6.0A	3.0A	1.5A	
Power dissipation		1.35W				1.6W				
On resistance	Typ.	0.05Ω	0.081Ω	0.34Ω	1.06Ω	0.11Ω	0.23Ω	0.7Ω	2.1Ω	
	Max.	0.09Ω	0.17Ω	0.55Ω	1.6Ω	0.18Ω	0.34Ω	1.1Ω	3.2Ω	
Output capacitance (Typ.)		1,700pF		900pF		1,400pF		600pF		
Off state leakage current (Max.)		10μA								
Input	LED forward current	50mA								
	LED reverse voltage	5V								
	Peak forward current	1A								
	Power dissipation	75mW								
	LED operate current	Typ.	1mA							
		Max.	3mA							
	LED turn off current	Min.	0.4mA							
Typ.		0.9mA								
LED dropout voltage	Typ.	1.25V (1.16V at I <sub>F</sub> = 10mA)								
	Max.	1.5V								
Turn on time	Typ.	1.66ms	1.89ms	0.83ms	1.01ms	2.46ms	2.4ms	1.12ms	1.65ms	
	Max.	5ms	5ms	5ms	5ms	5ms	5ms	5ms	5ms	
Turn off time	Typ.	0.15ms	0.19ms	0.08ms	0.08ms	0.22ms	0.21ms	0.10ms	0.08ms	
	Max.	3ms	3ms	3ms	3ms	3ms	3ms	3ms	3ms	
Total power dissipation		1.35W				1.6W				
I/O isolation voltage		2,500Vrms								
Ambient temperature	Operating	-40 to +85°C -40 to +185°F								
	Storage	-40 to +100°C -40 to +212°F								
I/O capacitance	Typ.	0.8pF								
	Max.	1.5pF								
Initial I/O isolation resistance (Min.)		1,000MΩ								
Terminal layout and recommended PC board pattern										
• Tolerance: ±0.1 ±.004 mm inch		BOTTOM VIEW								
Safety standards		UL/C-UL, VDE								
Mass (weight) (approx.)		1.65g .058oz								
Packing style		PA-N relay PC board type socket / Self clinching type socket								



Power: Slim & power **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		Power		Power Voltage-sensitive				
		1 Form B		1 Form A				
		AC/DC		DC				
Appearance configuration *Standoff height included  mm inch								
		Part No.		AQZ404	AQZ102D	AQZ105D	AQZ107D	AQZ104D
Load voltage	Peak AC	400V		—				
	DC	400V		60V	100V	200V	400V	
Output	Continuous load current		3A					
			1A					
	Peak load current		1.5A		9A	6A	3A	1.5A
	Power dissipation		1.6W		1.35W			
On resistance	Typ.	2.8Ω		0.033Ω	0.09Ω	0.33Ω	1.23Ω	
	Max.	4.0Ω		0.09Ω	0.17Ω	0.55Ω	1.6Ω	
Output capacitance (Typ.)		2,000pF		1,700pF		900pF		
Off state leakage current (Max.)		10μA		10μA				
Input	LED forward current		50mA		Input voltage: 30V			
	LED reverse voltage		5V		Input reverse voltage: 5V			
	Peak forward current		1A		—			
	Power dissipation		75mW		300mW			
	LED operate current	Typ.	1mA		Operate voltage: 1.4V 4V			
		Max.	3mA					
	LED turn off current	Min.	0.4mA		Turn off voltage: 0.8V 1.3V			
Typ.		0.9mA						
LED dropout voltage		Typ.	1.25V (1.16V at I <sub>F</sub> = 10mA)		Input current (Typ.): 6.5mA			
		Max.	1.5V					
Turn on time	Typ.	3.9ms		3.3ms	2.2ms	1.5ms	1.2ms	
	Max.	7.5ms		10ms	10ms	10ms	10ms	
Turn off time	Typ.	0.8ms		0.2ms		0.1ms		
	Max.	3ms		3ms		3ms		
Total power dissipation		1.6W		1.35W				
I/O isolation voltage		2,500Vrms		2,500Vrms				
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		-40 to +85°C (4V≤V <sub>IN</sub> ≤6V), -40 to +75°C (6V≤V <sub>IN</sub> ≤15V), -40 to +60°C (15V≤V <sub>IN</sub> ≤30V) -40 to +185°F (4V≤V <sub>IN</sub> ≤6V), -40 to +167°F (6V≤V <sub>IN</sub> ≤15V), -40 to +140°F (15V≤V <sub>IN</sub> ≤30V)				
	Storage	-40 to +100°C -40 to +212°F		-40 to +100°C -40 to +212°F				
I/O capacitance	Typ.	0.8pF		0.8pF				
	Max.	1.5pF		1.5pF				
Initial I/O isolation resistance (Min.)		1,000MΩ		1,000MΩ				
Terminal layout and recommended PC board pattern  • Tolerance: ±0.1 ±.004 mm inch								
		BOTTOM VIEW		BOTTOM VIEW				
Safety standards		UL/C-UL, VDE		UL/C-UL, VDE				
Mass (weight) (approx.)		1.65g .058oz		1.65g .058oz				
Packing style		PA-N relay PC board type socket / Self clinching type socket		PA-N relay PC board type socket / Self clinching type socket				

# PhotoMOS<sup>®</sup> Selector Chart

Power: Slim & power **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		Power Voltage-sensitive				Power High Capacity								
		1 Form A				1 Form A								
		AC/DC				AC/DC								
Appearance configuration *Standoff height included  mm inch														
										<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"><b>New</b></div> <div style="text-align: center;"><b>New</b></div> <div style="text-align: center;"><b>New</b></div> <div style="text-align: center;"><b>New</b></div> </div>				
Part No.		AQZ202D	AQZ205D	AQZ207D	AQZ204D	AQZ262	AQZ264	AQZ202G	AQZ205G	AQZ207G	AQZ206G2			
Load voltage	Peak AC	60V	100V	200V	400V	60V	400V	60V	100V	200V	600V			
	DC	60V	100V	200V	400V	60V	400V	60V	100V	200V	600V			
Continuous load current	6A													
	1A													
Peak load current		9A	6A	3A	1.5A	10A	3A	12A	8A	6A	3A			
Power dissipation		1.6W				3W		1.6W						
On resistance	Typ.	0.066Ω	0.180Ω	0.64Ω	2.4Ω	0.036Ω	1Ω	0.015Ω	0.035Ω	0.18Ω	0.52Ω			
	Max.	0.18Ω	0.34Ω	1.1Ω	3.2Ω	0.05Ω	1.4Ω	0.03Ω	0.06Ω	0.35Ω	0.8Ω			
Output capacitance (Typ.)		1,400pF		600pF		1,400pF	600pF	1,600pF	1,240pF	700pF	3,000pF			
Off state leakage current (Max.)		10μA				10μA								
Input	LED forward current	Input voltage: 30V				50mA								
	LED reverse voltage	Input reverse voltage: 5V				5V								
	Peak forward current	—				1A								
	Power dissipation	300mW				75mW								
	LED operate current	Typ.	Operate voltage: 1.4V				1mA							
		Max.	Operate voltage: 4V				3mA							
	LED turn off current	Min.	Turn off voltage: 0.8V				0.4mA		0.2mA					
Typ.		Turn off voltage: 1.3V				0.9mA		0.9mA						
LED dropout voltage	Typ. Max.	Input current (Typ.): 6.5mA				1.25V 1.5V								
Turn on time	Typ.	5.8ms	4.2ms	2.7ms	2.3ms	5ms	4ms	3.8ms	5.0ms	2.5ms	3.0ms			
	Max.	10ms	10ms	10ms	10ms	10ms	10ms	10ms	10ms	10ms	10ms			
Turn off time	Typ.	0.2ms		0.1ms		0.32ms	0.14ms	0.2ms	0.3ms	0.2ms	0.2ms			
	Max.	3ms		3ms		3ms	3ms	3ms	3ms	3ms	3ms			
Total power dissipation		1.6W				3W		1.6W						
I/O isolation voltage		2,500Vrms				1,500Vrms		2,500Vrms						
Ambient temperature	Operating	-40 to +85°C (4V≤V <sub>IN</sub> ≤6V), -40 to +75°C (6V≤V <sub>IN</sub> ≤15V), -40 to +60°C (15V≤V <sub>IN</sub> ≤30V) -40 to +185°F (4V≤V <sub>IN</sub> ≤6V), -40 to +167°F (6V≤V <sub>IN</sub> ≤15V), -40 to +140°F (15V≤V <sub>IN</sub> ≤30V)				-40 to +85°C -40 to +185°F								
	Storage	-40 to +100°C -40 to +212°F				-40 to +100°C -40 to +212°F								
I/O capacitance	Typ.	0.8pF				2pF		0.8pF						
	Max.	1.5pF				4pF		1.5pF						
Initial I/O isolation resistance (Min.)		1,000MΩ				1,000MΩ								
Terminal layout and recommended PC board pattern														
	• Tolerance: ±0.1 ±.004 mm inch		BOTTOM VIEW		BOTTOM VIEW				BOTTOM VIEW					
Safety standards		UL/C-UL, VDE				UL/C-UL, VDE		UL/C-UL, VDE						
Mass (weight) (approx.)		1.65g .058oz				10.6g .374oz		1.65g .058oz						
Packing style		PA-N relay PC board type socket / Self clinching type socket				—								

\* Please refer to website for safety standard.

Power: Slim & power **GU** **GE** **CC** **RF** **HE** **HF** **HS** **PD** **Power**

Product name		Power DC High Capacity		
		1 Form A		
		DC		
Appearance configuration *Standoff height included				
Part No.		AQZ192	AQZ197	
Output	Load voltage	Peak AC	—	
		DC	60V	
	Continuous load current	6A	10A	5A
		1A		
		0.5A		
	Peak load current	30A	15A	
	Power dissipation	2W		
	On resistance	Typ.	0.008Ω	0.031Ω
		Max.	0.015Ω	0.05Ω
	Output capacitance (Typ.)	2,100pF		
Off state leakage current (Max.)	10μA			
Input	LED forward current	50mA		
	LED reverse voltage	5V		
	Peak forward current	1A		
	Power dissipation	75mW		
	LED operate current	Typ.	0.7mA	
		Max.	3mA	
	LED turn off current	Min.	0.2mA	
Typ.		0.5mA		
LED dropout voltage	Typ.	1.35V (1.17V at I <sub>F</sub> = 10mA)		
	Max.	1.5V		
Turn on time	Typ.	1ms	0.7ms	
	Max.	3ms	3ms	
Turn off time	Typ.	0.11ms	0.05ms	
	Max.	1ms	1ms	
Total power dissipation	2W			
I/O isolation voltage	3,000Vrms			
Ambient temperature	Operating	-40 to +85°C -40 to +185°F		
	Storage	-40 to +100°C -40 to +212°F		
I/O capacitance	Typ.	1.3pF		
	Max.	3pF		
Initial I/O isolation resistance (Min.)	1,000MΩ			
Terminal layout and recommended PC board pattern				
• Tolerance: ±0.1 ±.004	mm inch			
Safety standards	UL/C-UL, VDE			
Mass (weight) (approx.)	4.3g .152oz			
Packing style	—			

\* Please refer to website for safety standard.