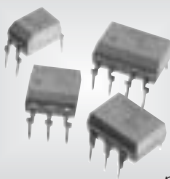

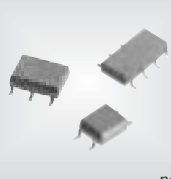


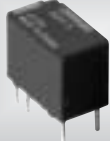
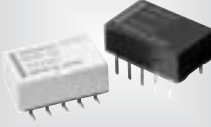



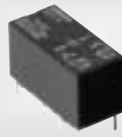


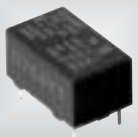
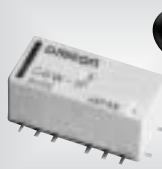


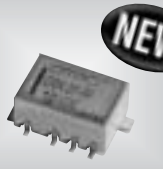




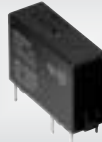

	MOS FET			
	 page 23	 page 23	 page 23	 page 23
	<b>G3VM PCB Mount</b>	<b>G3VM SMT</b>	<b>G3VM SOP</b>	<b>G3VM SSOP</b>
<b>Dimensions mm (in)</b>	Please refer to data sheet for all dimension information	Please refer to data sheet for all dimension information	Please refer to data sheet for all dimension information	4 pin: 3.8 L x 2.04 W x 1.8 H (0.15 x 0.08 x 0.07)
<b>Features</b>	<ul style="list-style-type: none"> <li>• Solid-state relay with MOS FET output and photo-LED input</li> <li>• Ideal for communications (telecom and datacom), computer peripheral, office automation, security, and control applications</li> </ul>	<ul style="list-style-type: none"> <li>• Solid-state relay with MOS FET output and photo-LED input</li> <li>• Ideal for communications (telecom and datacom), computer peripheral, office automation, security, and control applications</li> </ul>	<ul style="list-style-type: none"> <li>• Solid-state relay with MOS FET output and photo-LED input</li> <li>• Ideal for communications (telecom and datacom), computer peripheral, office automation, security, and control applications</li> <li>• Low ON resistance and low output capacitance versions ideal for ATE and Instrumentation</li> </ul>	<ul style="list-style-type: none"> <li>• Solid-state relay with MOS FET output and photo-LED input</li> <li>• Ideal for communications (telecom and datacom), computer peripheral, office automation, security, and control applications</li> <li>• Low ON resistance and low output capacitance versions ideal for ATE and Instrumentation</li> </ul>
<b>Load voltage</b>	60 – 600 V	20 – 600 V	20 – 400 V	20 – 40 V
<b>Contact form</b>	1 Form A, 2 Form A, 1 Form B, 2 Form B, 1 Form A+1 Form B	1 Form A, 2 Form A, 1 Form B, 2 Form B, 1 Form A+1 Form B	1 Form A, 2 Form A, 1 Form B, 2 Form B	1 Form A
<b>Load current</b>	100 – 2000 mA	120 – 2000 mA	80 – 1250 mA	80 – 300 mA
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	1500 VAC, 2500 VAC, 5000 VAC	1500 VAC, 2500 VAC, 5000 VAC	1500 VAC	1500 VAC
<b>Surge withstand (50/60 Hz for 1 second)</b>	3,000 VAC, 5,000 VAC, 10,000 VAC	3,000 VAC, 5,000 VAC, 10,000 VAC	3,000 VAC	3,000 VAC
<b>ON resistance</b>	0.12 – 45 Ohm	0.12 – 35 Ohm	0.15 – 35 Ohm	1.5 – 35 Ohm
<b>Output capacitance</b>	30 – 1400 pF	8 – 1400 pF	2.5 – 1000 pF	1.0 – 14 pF
<b>Packaging</b>	Tube	Tube or tape and reel	Tube or tape and reel	Tape and reel
<b>Additional features</b>	Low ON resistance, current limiting, high I/O isolation	Low ON resistance, current limiting, high I/O isolation	Low ON resistance, low output capacitance	Low ON resistance, low output capacitance

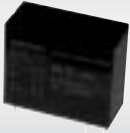


	Low Signal			
	 <i>page 108</i>	 <i>page 114</i>	 <i>page 136</i>	 <i>page 142</i>
	<b>G5A</b>	<b>G5V-1</b>	<b>G6H</b>	<b>G6J</b>
<b>Dimensions mm (in)</b>	8.38 H x 16 L x 9.9 W (0.33 x 0.63 x 0.39)	10.0 H x 12.50 L x 7.50 W (0.39 x 0.49 x 0.30)	5.08 H x 13.97 L x 8.89 W (0.20 x 0.55 x 0.35)	9.0 H x 10.30 L x 4.80 W (0.35 x 0.41 x 0.19)
<b>Switching</b>	1 A max., 10 µA min.	1 A max., 1 mA min.	1 A max., 10 µA min.	1 A max., 10 µA min.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Miniature relay</li> <li>• Semi-sealed or fully-sealed construction</li> </ul>	<ul style="list-style-type: none"> <li>• 150 mW power consumption</li> <li>• Small size</li> <li>• 1.5 kV surge withstand</li> <li>• Available in PCB</li> </ul>	<ul style="list-style-type: none"> <li>• Low profile (5 mm type)</li> <li>• SMT and PCB versions</li> <li>• 1.5 kV surge withstand</li> </ul>	<ul style="list-style-type: none"> <li>• The slimmest relay in the industry, ideal for high-density applications in telecom, datacom, IT, computer peripheral and office automation</li> <li>• Fully-sealed completely</li> <li>• Pb-free construction</li> <li>• 2.5 kV surge withstand</li> <li>• PCB and SMT versions</li> </ul>
<b>Contact Ratings</b>				
<b>Contact form</b>	2 Form C	1 Form C	2 Form C	2 Form C
<b>Contact type</b>	Bifurcated crossbar	Single crossbar	Bifurcated crossbar	Bifurcated crossbar
<b>Contact material</b>	Ag with Au clad	Ag with Au clad	Ag with Au clad	Ag with Au clad
<b>Max. operating current under resistive load</b>	1 A	1 A	1 A	1 A
<b>Max. operating voltage</b>	125 VAC, 125 VDC	125 VAC, 60 VDC	125 VAC, 110 VDC	125 VAC, 110 VDC
<b>Max. switching capacity under resistive load</b>	37.5 VA, 33 W	62.5 VA, 30 W	62.5 VA, 33 W	37.5 VA, 30 W
<b>Minimum permissible load</b>	–	1 mA, 5 VDC	10 µA, 10 mVDC	10 µA, 10 mVDC
<b>Rated load (under resistive load)</b>	0.5 A at 24 VAC, 1 A at 24 VDC	0.5 A at 125 VAC, 1 A at 24 VDC	0.5 A at 125 VAC, 1 A at 30 VDC	0.3 A at 125 VAC, 1 A at 30 VDC
<b>Coil Ratings</b>				
<b>Coil voltage</b>	5, 6, 9, 12, 24, 48 VDC	5, 6, 9, 12, 24 VDC	3, 5, 6, 9, 12, 24, 48 VDC	3, 4.5, 5, 12, 24 VDC
<b>Power consumption</b>	200 mW (standard and latching)	150 mW	140 mW (standard)	140 mW (standard), 100 mW (single coil latching)
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	1,000 VAC (FCC version only)	1,000 VAC	1,000 VAC	1,500 VAC
<b>Surge withstand</b>	1.5 kV (10 x 160 µs) (FCC version only)	1.5 kV (10 x 160 µs)	1.5 kV (10 x 160 µs)	2.5 kV (2 x 10 µs)
<b>Electrical service life (operations)</b>	100,000 minimum	100,000 minimum	100,000 minimum	100,000 minimum
<b>Terminal choices</b>	PCB	PCB	PCB (G6H), SMT gullwing (G6H-2F)	PCB, SMT gullwing, SMT shortened gullwing
<b>Packaging</b>	–	–	–	Tape and reel
<b>Approved standards</b>	UL, CSA, (FCC Part 68 available)	UL, CSA	UL, CSA, (FCC Part 68)	UL, CSA, (FCC Part 68)




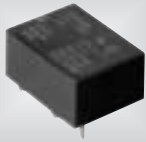
	Low Signal			
	 page 152	 page 160	 page 118	 page 122
	<b>G6K</b>	<b>G6L</b>	<b>G5V-2</b>	<b>G6A</b>
<b>Dimensions mm (in)</b>	5.30 H x 10.20 L x 6.70 W (0.21 x 0.40 x 0.26)	4.2 H x 10.6 L x 7.0 W (0.17 x 0.42 x 0.28)	11.43 H x 20.32 L x 9.91 W (0.45 x 0.80 x 0.39)	8.40 H x 20.20 L x 10.10 W (0.33 x 0.80 x 0.40)
<b>Switching</b>	1 A max., 10 µA min.	1 A max., 1 mA min.	2 A max., 10 µA min.	2 A max., 10 µA min.
<b>Features</b>	<ul style="list-style-type: none"> <li>Extremely small size</li> <li>2.5 kV surge withstand</li> <li>SMT and PCB versions</li> </ul>	<ul style="list-style-type: none"> <li>Very low profile</li> <li>1.5 kV surge withstand</li> <li>SMT and PCB versions</li> </ul>	<ul style="list-style-type: none"> <li>150 mW, 360 mW, 500 mW versions</li> <li>Industry standard footprint</li> <li>1.5 kV surge withstand</li> </ul>	<ul style="list-style-type: none"> <li>200 mW, 400 mW versions</li> <li>1.5 kV surge withstand</li> <li>Latching versions available</li> </ul>
<b>Contact Ratings</b>				
<b>Contact form</b>	2 Form C	1 Form A	2 Form C	2 Form C, 4 Form C
<b>Contact type</b>	Bifurcated crossbar	Single crossbar	Bifurcated crossbar	Bifurcated crossbar
<b>Contact material</b>	Ag with Au clad	Ag with Au clad	Ag with Au clad	Ag with Au clad; AgPd with Au clad
<b>Max. operating current under resistive load</b>	1 A	1 A	2 A (1 A ultra-sensitive)	2 A
<b>Max. operating voltage</b>	125 VAC, 60 VDC	125 VAC, 60 VDC	125 VAC, 125 VDC	250 VAC, 220 VDC
<b>Max. switching capacity under resistive load</b>	37.5 VA, 30 W	37.5 VA, 24 W	62.5 VA, 60 W	125 VA, 60 W
<b>Minimum permissible load</b>	10 µA, 10 mVDC	1 mA, 5 VDC	10 µA, 10 mVDC	10 µA, 10 mVDC
<b>Rated load (under resistive load)</b>	0.3 A at 125 VAC, 1 A at 30 VDC	0.3 A at 125 VAC, 1 A at 24 VDC	0.5 A at 125 VAC, 2 A at 30 VDC	0.5 A at 125 VAC, 2 A at 30 VDC; 0.3 at 125 VAC, 1 A at 30 VDC
<b>Coil Ratings</b>				
<b>Coil voltage</b>	3, 4.5, 5, 6, 9, 12, 24 VDC	3, 4.5, 5, 12, 24 VDC	3, 5, 6, 9, 12, 24, 48 VDC	3, 5, 6, 9, 12, 24, 48 VDC
<b>Power consumption</b>	100 mW (standard and latching)	180 mW (standard)	500 mW (standard), 360 mW (high-sensitivity), 150 mW (ultra-sensitive)	200 mW (DPDT standard), 180 mW (DPDT latching), 360 mW (4PDT standard)
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	1,500 VAC	1,000 VAC	1,000 VAC	1,000 VAC
<b>Surge withstand</b>	2.5 kV (2 x 10 µs)	–	1.5 kV (10 x 160 µs)	1.5 kV (10 x 160 µs)
<b>Electrical service life (operations)</b>	100,000 minimum	100,000 min.	300,000 minimum	500,000 minimum
<b>Terminal choices</b>	Gullwing, "inside-L," PCB	PCB, SMT Gullwing	PCB	PCB
<b>Packaging</b>	Tape and reel	Tape and reel	–	–
<b>Approved standards</b>	UL, CSA, (FCC Part 68)	UL/CSA (FCC Part 68)	UL, CSA	UL, CSA, (FCC Part 68)

Low Signal		
	 <b>G6S</b> <i>page 168</i>	 <b>G6E</b> <i>page 130</i>
<b>Dimensions mm (in)</b>	9.40 H x 15 L x 7.50 W (0.37 x 0.59 x 0.30)	8.38 H x 16 L x 9.9 W (0.33 x 0.63 x 0.39)
<b>Switching</b>	2 A max., 10 µA min.	3 A max., 10 µA min.
<b>Features</b>	<ul style="list-style-type: none"> <li>• 2.5 kV surge withstand</li> <li>• SMT and PCB versions</li> <li>• European versions available</li> </ul>	<ul style="list-style-type: none"> <li>• Bellcore 2.5 kV surge withstand</li> <li>• 200 mW, 400 mW versions;</li> <li>• Latching versions available</li> </ul>
<b>Contact Ratings</b>		
<b>Contact form</b>	2 Form C	1 Form C
<b>Contact type</b>	Bifurcated crossbar	Bifurcated crossbar
<b>Contact material</b>	Ag with Au clad; AgPd with Au clad	Ag with Au clad
<b>Max. operating current under resistive load</b>	2 A	3 A
<b>Max. operating voltage</b>	250 VAC, 220 VDC	250 VAC, 220 VDC
<b>Max. switching capacity under resistive load</b>	62.5 VA, 60 W	50 VA, 60 W
<b>Minimum permissible load</b>	10 µA, 10 mVDC	10 µA, 10 mVDC
<b>Rated load (under resistive load)</b>	0.5 at 125 VAC, 2 A at 30 VDC	0.4 A at 125 VAC, 2 A at 30 VDC
<b>Coil Ratings</b>		
<b>Coil voltage</b>	3, 4.5, 5, 6, 9, 12, 24 VDC	3, 5, 6, 9, 12, 24, 48 VDC
<b>Power consumption</b>	140 mW (standard) 140 mW, 200 mW (latching)	200 mW (standard), 400 mW (low-sensitivity) standard and latching
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	2,000 VAC standard	1,500 VAC
<b>Surge withstand</b>	2.5 kV (2 x 10 µs)	2.5 kV (2 x 10 µs)
<b>Electrical service life (operations)</b>	100,000 minimum	500,000 minimum (DC), 100,000 minimum (AC)
<b>Terminal choices</b>	Gullwing, "inside L," PCB	PCB
<b>Packaging</b>	Tape and reel	–
<b>Approved standards</b>	UL, CSA, (FCC Part 68)	UL, CSA, (FCC Part 68)


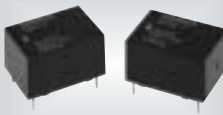

	Low Signal HF			
	 <b>G6W</b> page 182	 <b>G6Y</b> page 190	 <b>G6Z</b> page 198	 <b>G6K-RF</b> page 178
<b>Dimensions mm (in)</b>	8.9 H x 20 L x 9.4 W (0.35 x 0.79 x 0.37)	9.20 H x 20.70 L x 11.70 W (0.36 x 0.81 x 0.46)	8.9 H x 20 L x 8.6 W (0.35 x 0.79 x 0.34)	5.4 H x 10.3 L x 6.9 W (0.21 x 0.41 x 0.27)
<b>Switching</b>	0.5 A max.	1 A max., 10 mA min.	0.5 A max.	1 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>Latching versions available</li> <li>Tri-plate micro strip line technology</li> </ul>	<ul style="list-style-type: none"> <li>Micro strip line technology</li> </ul>	<ul style="list-style-type: none"> <li>75 <math>\Omega</math> and 50 <math>\Omega</math> impedance versions</li> <li>Latching versions available</li> <li>Micro strip line technology</li> </ul>	<ul style="list-style-type: none"> <li>100 mW power consumption</li> </ul>
<b>HF Characteristics</b>				
<b>Isolation</b>	65 dB (2 GHz) 60 dB (2.5 GHz) 40 dB (5.0 GHz)	65 dB (900 MHz)	60 - 65 dB (900 MHz) 30 - 45 dB (2.6 GHz)	20 - 30 dB (1 GHz)
<b>Insertion Loss</b>	0.2 dB (2 GHz) 0.2 dB (2.5 GHz) 0.4 dB (5.0 GHz)	0.5 dB (900 MHz)	0.1 - 0.2 dB (900 MHz) 0.3 - 0.5 dB (2.6 GHz)	0.2 dB (1 GHz)
<b>VSWR</b>	1.2 (2 GHz) 1.2 (2.5 GHz) 1.5 (5.0 GHz)	1.5 (900 MHz)	1.1 - 1.2 (900 MHz) 1.3 - 1.5 (2.6 GHz)	1.2 (1 GHz)
<b>Contact Ratings</b>				
<b>Contact form</b>	1 Form C	1 Form C	1 Form C	2 Form C
<b>Contact type</b>	Twin crossbar	Twin crossbar	Twin crossbar	Bifurcated crossbar
<b>Contact material</b>	Au clad Cu alloy	Au clad Cu alloy	Au clad Cu alloy	Au alloy on Ag base
<b>Max. operating current under resistive load</b>	0.5 A	0.5 A	0.5 A	1 A
<b>Max. operating voltage</b>	30 VDC, 30 VAC	30 VAC, 30 VDC	30 VAC, 30 VDC	60 VDC, 125 VAC
<b>Max. switching capacity under resistive load</b>	10 VA, 10 W	10 VA, 10 W	10 VA, 10 W	37.5 VA, 30 W
<b>Rated load (under resistive load)</b>	10 mA at 30 VAC 10 mA at 30 VDC 2.5 GHz, 10 W	10 mA at 30 VAC; 10 mA at 30 VAC; 900 MHz, 1 W	10 mA at 30 VAC; 10 mA at 30 VDC; 900 MHz, 10 W	0.3 A, 125 VAC; 1 A, 30 VDC
<b>Coil Ratings</b>				
<b>Coil voltage</b>	3, 4.5, 9, 12, 24 VDC	3, 4.5, 5, 6, 9, 12, 24 VDC	3, 4.5, 5, 9, 12, 24 VDC	3, 4.5, 5, 6, 9, 12, 24 VDC
<b>Power consumption</b>	200 mW (standard) 200 mW (single latching) 360 mW (dual latching)	200 mW	200 mW (standard) 200 mW (single latching) 360 mW (dual latching)	100 mW
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	1,000 VAC	1,000 VAC	1,000 VAC	750 VAC
<b>Electrical service life (operations)</b>	1,000,000 minimum	100,000 minimum	1,000,000 minimum	100,000 minimum
<b>Terminal choices</b>	PCB, SMT Gullwing	PCB	PCB, SMT Gullwing	SMT Gullwing
<b>Packaging</b>	–	–	Tape and reel	–

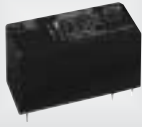



	Power PCB			
	 page 260	 page 270	 page 292	 data sheet available at <a href="http://www.knowledge.omron.com">www.knowledge.omron.com</a>
	<b>G5PA</b>	<b>G5S</b>	<b>G6D</b>	<b>G6M</b>
<b>Dimensions mm (in)</b>	25 H x 24 L x 10 W (0.98 x 0.94 x 0.39) max.	15.5 H x 20 L x 10 W (0.61 x 0.79 x 0.39)	12.5 H x 17.5 L x 6.5 W (0.49 x 0.69 x 0.26)	17.7 H x 20.3 L x 5.08 W (0.70 x 0.80 x 0.20) max.
<b>Switching</b>	5 A max.	5 A max.	5 A max.	5 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>• TV5 rated</li> <li>• Slim style</li> <li>• Semi-sealed, SPST-NO</li> </ul>	<ul style="list-style-type: none"> <li>• Compact PCB relay with high insulation</li> <li>• Withstands impulse of 8 kV coil to contacts</li> <li>• Class B insulation option</li> </ul>	<ul style="list-style-type: none"> <li>• Subminiature, slim lightweight design</li> <li>• Low power consumption</li> <li>• Sealed construction</li> </ul>	<ul style="list-style-type: none"> <li>• Slim 5 mm width, and miniature size</li> <li>• Reduced bottom area ideal for high-density mounting</li> <li>• Highly efficient magnetic circuit for high sensitivity</li> <li>• Cadmium-free contacts</li> <li>• UL Class I, Division II approved for hazardous locations</li> </ul>
<b>Contact Ratings</b>				
<b>Contact form</b>	1 Form A	1 Form A, 1 Form C	1 Form A	1 Form A
<b>Standard contact type</b>	Single button	Single button	Single button	Single button
<b>Standard contact material</b>	AgSnO <sub>2</sub>	Ag	Ag alloy	Ag Alloy
<b>Max. operating current under resistive load</b>	5 A	5 A	5 A	5 A
<b>Max. operating voltage</b>	250 VAC, 30 VDC	30 VDC, 277 VAC	250 VAC, 30 VDC	270 VAC, 125 VDC
<b>Max. switching capacity under resistive load</b>	1,250 VA, 150 W	625 VA/150 W (NO); 375 VA/ 90 W (NC)	1,250 VA, 150 W	750 VA, 90 W
<b>Minimum permissible load</b>	100 mA, 5 VDC	10 mA at 5 VDC	10 mA, 5 VDC	10 mA at 5 VDC (at 120 operations min.)
<b>Rated load (under resistive load)</b>	5 A at 250 VAC, 30 VDC	5 A/3 A at 125 VAC, 5 A/3 A at 30 VDC (NO/NC)	5 A at 250 VAC, 5 A at 30 VDC	3 A at 250 VAC, 3 A at 30 VDC
<b>Coil Ratings</b>				
<b>Coil voltage</b>	6, 12, 24 VDC	5, 9, 12, 18, 24, 48 VDC	5, 12, 24 VDC	5, 12, 24 VDC
<b>Power consumption</b>	530 mW, 250 mW (high sensitivity)	400 mW	200 mW	Approx. 120 mW
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	4,000 VAC	4,000 VAC (coil to contacts); 750 VAC (between contacts)	3,000 VAC	3,000 VAC, 50/60 Hz for 1 minute between coil and contacts; 750 VAC, 50/60 Hz for 1 minute between contacts of same polarity
<b>Electrical service life (operations)</b>	100,000 minimum	100,000 (5 A/3 A at 30 VDC, resistive); 50,000 (5 A/3 A at 125 VAC, resistive) minimum	100,000 minimum	100,000 minimum
<b>Terminal choices</b>	PCB	PCB	PCB	PCB
<b>Accessories</b>	N/A	N/A	Socket for back connecting sockets with PCB terminals	N/A
<b>Approved standards</b>	UL, CSA, SEV, SEMKO, TUV	UL, CSA, TUV	UL, CSA, TUV, SEV	UL/CSA, VDE pending


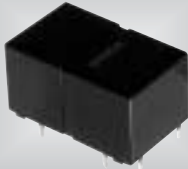

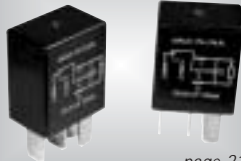
Power PCB			
	 <i>page 234</i>	 <i>page 246</i>	 <i>page 276</i>
	<b>G2RG</b>	<b>G5B</b>	<b>G6B</b>
<b>Dimensions mm (in)</b>	25.5 H x 29 L x 13 W (1.00 x 1.14 x 0.51)	14 H x 22.1 L x 11.43 W (0.55 x 0.87 x 0.45)	9.91 H x 20.07 L x 9.91 W (0.39 x 0.79 x 0.39)
<b>Switching</b>	8 A max.	8 A max.	8 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Clearance for between contact terminals of the same polarity 1.5 mm</li> <li>• Dimensions and mounting holes are same as G2R relay series</li> <li>• Cadmium free contacts</li> </ul>	<ul style="list-style-type: none"> <li>• Low profile</li> <li>• Low power consumption</li> <li>• High surge withstand</li> </ul>	<ul style="list-style-type: none"> <li>• Subminiature and low power</li> <li>• Sealed construction</li> <li>• Latching types available</li> </ul>
<b>Contact Ratings</b>			
<b>Contact form</b>	2 Form A	1 Form A	1 Form A, 2 Form A, 1 Form A + 1 Form B
<b>Standard contact type</b>	Single button	Single button	Single button
<b>Standard contact material</b>	AgSnO	Ag, AgCdO	AgCdO
<b>Max. operating current under resistive load</b>	8 A	3 A; 8 A (high capacity)	5 A
<b>Max. operating voltage</b>	380 VAC, 125 VDC	250 VAC, 30 VDC	380 VAC, 125 VDC
<b>Max. switching capacity under resistive load</b>	2,000 VA	750 VA, 90 W; 2,000 VA, 240 W	1,250 VA, 150 W
<b>Minimum permissible load</b>	10 mA at 5 VDC	10 mA, 5 VDC	10 mA, 5 VDC
<b>Rated load (under resistive load)</b>	8 A at 250 VAC	3 A at 125 VAC, 30 VDC; 8 A at 125 VAC, 30 VDC	5 A at 250 VAC, 5A at 30 VDC
<b>Coil Ratings</b>			
<b>Coil voltage</b>	12, 24 VDC	5, 12, 24 VDC	5, 6, 12, 24 VDC
<b>Power consumption</b>	Approx. 800 mW	360 mW	200 mW (standard and latching)
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	5,000 VAC, 50/60 Hz for 1 minute between coil and contacts; 3,000 VAC, 50/60 Hz for 1 minute between contacts of different polarity; 1,000 VAC, 50/60 Hz for 1 minute between contacts of same polarity	4,000 VAC	3,000 VAC
<b>Electrical service life (operations)</b>	10,000 operations min. (at 1,800 operations/hr under rated load)	100,000 minimum	100,000 minimum
<b>Terminal choices</b>	PCB	PCB	PCB
<b>Accessories</b>	–	N/A	Sockets and clips for back connecting sockets with PCB terminals
<b>Approved standards</b>	UL/CSA, VDE	UL, CSA, TUV	UL, CSA, (FCC Part 68)



Power PCB				
	 page 296	 page 254	 page 264	 page 284
	<b>G6RN</b>	<b>G5LE</b>	<b>G5Q</b>	<b>G6C</b>
<b>Dimensions mm (in)</b>	15 H x 17.5 L x 6.5 W (0.59 x 0.69 x 0.26)	19 H x 22.5 L x 16.5 W (0.75 x 0.89 x 0.65)	15.8 H x 20.3 L x 10.3 W (0.62 x 0.80 x 0.41) max.	9.91 H x 20.07 L x 14.99 W (0.39 x 0.79 x 0.59)
<b>Switching</b>	8 A max.	10 A max.	10 A max. (NO contacts)	10 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>• 8 mm coil/contact spacing</li> <li>• Low profile</li> <li>• Sealed construction</li> <li>• Ideal for switching contactors, solenoids and motors</li> </ul>	<ul style="list-style-type: none"> <li>• Small 'ice cube' size</li> <li>• UL Class B insulation</li> <li>• VDE, Class F options</li> </ul>	<ul style="list-style-type: none"> <li>• Compact PCB relay with high insulation</li> <li>• Withstands impulse of 8 kV coil to contacts</li> <li>• Class F coil insulation</li> <li>• Low coil power consumption</li> </ul>	<ul style="list-style-type: none"> <li>• Low power consumption</li> <li>• Low profile</li> <li>• Latching types available</li> </ul>
<b>Contact Ratings</b>				
<b>Contact form</b>	1 Form A, 1 Form C	1 Form A, 1 Form C	1 Form A, 1 Form C	1 Form A + 1 Form B, 1 Form A
<b>Standard contact type</b>	Single button	Single button	Single button	Single button
<b>Standard contact material</b>	AgNi + gold plating	AgSnO <sub>2</sub>	Ag Alloy	AgCdO
<b>Max. operating current under resistive load</b>	8 A	10 A	10 A (SPDT-NO), 3 A (SPDT-NC), 10 A (SPST-NO)	10 A (SPST-NO); 8 A (SPST-NO+SPST-NC)
<b>Max. operating voltage</b>	250 VAC, 125 VDC	250 VAC, 125 VDC	277 VAC, 30 VDC	380 VAC, 125 VDC
<b>Max. switching capacity under resistive load</b>	2,000 VA, 150 W	1,200 VA, 240 W	1250 VA, 150 W (NO) 375 VA, 90 W (NC)	2,500 VA, 300 W; 2,000 VA, 240 W (SPST-NO+SPST-NC)
<b>Minimum permissible load</b>	10 mA, 5 VDC	100 mA, 5 VDC	10 mA at 5 VDC	10 mA, 5 VDC
<b>Rated load (under resistive load)</b>	8 A at 250 VAC; 5 A at 30 VDC	10 A at 120 VAC, 8 A at 30 VDC	10 A at 125 VAC (SPDT-NO) 3 A at 250 VAC (SPDT-NO) 5 A at 30 VDC (SPDT-NO) 3 A at 125 VAC (SPDT-NC) 3 A at 30 VDC (SPDT-NC) 10 A at 125 VAC (SPST-NO) 3 A at 250 VAC (SPST-NO) 5 A at 30 VDC (SPST-NO)	10 A at 250 VAC, 10 A at 30 VDC; 8 A at 250 VAC, 8 A at 30 VDC
<b>Coil Ratings</b>				
<b>Coil voltage</b>	5, 6, 12, 24 VDC	5, 6, 12, 24, 48 VDC	5, 12, 24 VDC	5, 6, 12, 24 VDC
<b>Power consumption</b>	220 mW	400 mW	400 mW (SPDT); 200 mW (SPST-NO)	200 mW (standard and single coil latching)
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	4,000 VAC	2,000 VAC	4,000 VAC, 50/60 Hz for 1 min. (coil to contacts); 1,000 VAC 50/60 Hz for 1 min. (between contacts)	2,000 VAC
<b>Electrical service life (operations)</b>	100,000 approx.	100,000 minimum	200,000: 3 A(NO)/3 A (NC) at 125 VAC resistive; 100,000: 3 A (NO)/3 A (NC) at 250 VAC; 5 A (NO)/3 A (NC) at 30 VDC resistive; 50,000: 10 A (NO) at 125 VAC (900 ops. per hour)	100,000 minimum
<b>Terminal choices</b>	PCB	PCB	PCB	PCB
<b>Accessories</b>	N/A	N/A	N/A	Socket for back connecting sockets with PCB terminals
<b>Approved standards</b>	UL, CSA, TUV, VDE, IEC	UL, CSA, TUV, (VDE available)	UL, CSA, VDE	UL, CSA, VDE, SEV







	Power PCB		
	 data sheet available at <a href="http://www.knowledge.omron.com">www.knowledge.omron.com</a>	 data sheet available at <a href="http://www.knowledge.omron.com">www.knowledge.omron.com</a>	 page 216
	G4W	G5C	G2R
<b>Dimensions mm (in)</b>	31 H x 45 L x 20 W (1.22 x 1.77 x 0.79)	10.92 H x 22.1 L x 16 W (0.43 x 0.87 x 0.63)	25.5 H x 29 L x 13 W (1 x 1.14 x 0.51)
<b>Switching</b>	15 A max.	15 A max.	16 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>• High surge withstand</li> <li>• 10 mm creepage distance</li> <li>• QC load/coil terminals</li> </ul>	<ul style="list-style-type: none"> <li>• Low power, subminiature relay switches up to 15 A loads</li> <li>• Semi-sealed or plastic sealed, standard or high capacity types available</li> </ul>	<ul style="list-style-type: none"> <li>• High dielectric withstand</li> <li>• 8 mm coil/contact spacing</li> <li>• 1 and 2 pole models</li> <li>• Class B insulation</li> <li>• 3 mm contact gap version available</li> </ul>
<b>Contact Ratings</b>			
<b>Contact form</b>	1 Form A, 2 Form A	SPST-NO	1 Form A, 1 Form C, 2 Form A, 2 Form C
<b>Standard contact type</b>	Single button	Single button	Single button
<b>Standard contact material</b>	AgCdO	AgCdO	AgCdO
<b>Max. operating current under resistive load</b>	15 A	15 A, 10 A	16 A (high capacity, 1-pole); 10 A (general purpose, 1-pole); 5 A (general purpose, 2-pole); 5 A (latching, 1-pole); 5 A (high sensitivity, 1-pole); 3 A (high sensitivity, 2-pole); 3 A (latching, 2-pole)
<b>Max. operating voltage</b>	250 VAC, 125 VDC	250 VAC, 30 VDC	380 VAC, 125 VDC
<b>Max. switching capacity under resistive load</b>	3,750 VA	2,500 VA, 300 W	4,000 VA, 480 W (1 pole); 1,250 VA, 150 W (2 pole)
<b>Minimum permissible load</b>	100 mA, 5 VDC	100 mA, 5 VDC	1 pole: 100 mA, 5 VDC; 2 pole: 10 mA, 5 VDC
<b>Rated load (under resistive load)</b>	15 A at 250 VAC, 15 A at 24 VDC	15 A at 110 VAC 10 A at 250 VAC 10 A at 30 VDC	16 A at 250 VAC, 30 VDC (high capacity); 10 A at 250 VAC, 30 VDC, General purpose (1 pole); 5 A at 250 VAC, 30 VDC, General purpose (2 pole)
<b>Coil Ratings</b>			
<b>Coil voltage</b>	12, 24 VDC	5, 6, 12, 24, 48	12, 24, 120, 240 VAC; 5, 6, 12, 24, 48 VDC
<b>Power consumption</b>	800 mW	200 mW, 150 mW (high sensitivity)	0.9 VA, 530 mW, 360 mW (high sensitivity); 850 mW (set), 600 mW (reset) latching
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	4,000 VAC	2,500 VAC	5,000 VAC
<b>Electrical service life (operations)</b>	100,000 minimum	100,000 minimum	100,000 minimum
<b>Terminal choices</b>	PCB, quick connect, solder	PCB	PCB terminal, plug in and quick connect
<b>Accessories</b>	–	–	Sockets for track mounted sockets with screw terminals and back connecting sockets with solder and PCB terminals Note: P2RF-S series screwless clamp terminal socket available
<b>Approved standards</b>	UL, CSA, VDE, SEMKO, TUV	UL, CSA	UL, CSA, SEV SEMKO, VDE, TUV




	Power PCB			
	 page 236	 page 250	 page 242	 page 300
	<b>G2RL</b>	<b>G5J</b>	<b>G4A</b>	<b>G8PT</b>
<b>Dimensions mm (in)</b>	15.5 H x 29 L x 12.7 W (0.61 x 1.14 x 0.50)	29.97 H x 28.96 L x 12.95 W (1.18 x 1.14 x 0.51)	32.5 H x 30.5 L x 16 W (1.28 x 1.20 x 0.63)	Varies by type
<b>Switching</b>	16 A max.	16 A max.	20 A max.	30 A max. (SPST) 20 A/10 A max. (SPDT)
<b>Features</b>	<ul style="list-style-type: none"> <li>• Low profile</li> <li>• High isolation</li> <li>• Class F insulation</li> <li>• Low power consumption</li> </ul>	<ul style="list-style-type: none"> <li>• PCB terminal &amp; quick-connect</li> <li>• Switches up to 16 A</li> <li>• Ideal for electrical appliances</li> </ul>	<ul style="list-style-type: none"> <li>• Small size</li> <li>• High switching capacity</li> <li>• QC load terminals</li> <li>• Standard semi-sealed construction</li> </ul>	<ul style="list-style-type: none"> <li>• High switching capacity</li> <li>• UL Class F insulation standard</li> <li>• Wide range of coil ratings</li> <li>• Sealed and Open frame models</li> <li>• UL508/UL873 spacing Column A</li> <li>• High impulse withstand of 6kV coil to contacts including the 6kV 100kHz ring wave (per IEC 1000-4-12)</li> </ul>
<b>Contact Ratings</b>				
<b>Contact form</b>	1 Form A, 1 Form C, 2 Form A, 2 Form C	SPST-NO	1 Form A	1 Form A, 1 Form C
<b>Standard contact type</b>	Single button	Single button	Single button	Single button
<b>Standard contact material</b>	AgSnO <sub>2</sub> (1 pole); AgNi (2 pole)	AgCdO	AgCdO	AgCdO
<b>Max. operating current under resistive load</b>	16 A (high capacity, 1-pole); 12 A (general purpose, 1-pole); 8 A (2-pole)	16 A	20 A	AC 30 A, DC 20 A (SPST-NO); AC 20/10 A, DC 20/10 A* (SPDT) *NO contact/NC contact
<b>Max. operating voltage</b>	440 VAC	250 VAC, 30 VDC	250 VAC	250 VAC, 28 VDC
<b>Max. switching capacity under resistive load</b>	4,000 VA, 384 W (high capacity, 1-pole); 3,000 VA, 288 W (general purpose 1-pole); 2,000 VA, 240 W (2 pole)	4,000 VA, 480 W	5,000 VA	7,500 VA, 560 W (SPST-NO); 5,000/2,500 VA, 560/280 W* (SPDT) *NO contact/NC contact
<b>Minimum permissible load</b>	10 mA, 5 VDC	100 mA, 5 VDC	100 mA, 5 VDC	DC 5 V, 500 mA
<b>Rated load (under resistive load)</b>	16 A at 250 VAC, 24 VDC (high capacity 1 pole); 12 A at 250 VAC, 24 VDC, General purpose (1 pole); 8 A at 250 VAC, 30 VDC, (2 pole)	16 A at 250 VAC 16 A at 30 VDC	20 A at 250 VAC	30 A at 250 VAC, 20 A at 28 VDC (SPST-NO); 20/10 A* at 250 VAC, 20/10 A at 28 VDC *NO contact/NC contact
<b>Coil Ratings</b>				
<b>Coil voltage</b>	5, 12, 24, 48 VDC	5, 6, 12, 18, 24 VDC	5, 12, 24 VDC	5, 9, 12, 24, 48, 110 VDC
<b>Power consumption</b>	400 mW (430 mW for 48 VDC)	700 mW	0.9 W	Approx. 900 mW
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	5,000 VAC	4,000 VAC	4,500 VAC	2,500 VAC, 50/60 Hz for 1 minute (coil to contacts); 1,500 VAC, 50/60 Hz for 1 minute (between contacts)
<b>Electrical service life (operations)</b>	Consult catalog page	100,000 minimum	100,000 minimum	100,000 minimum
<b>Terminal choices</b>	PCB	PCB and quick-connect	PCB (coil and load), quick-connect (load) or PCB (coil and load)	PCB, PCB & quick-connect load terminals, flange mount quick-connect terminals
<b>Accessories</b>	–	–	–	N/A
<b>Approved standards</b>	UL, CSA, VDE	UL, CSA	UL, CSA, TUV	UL/CSA, VDE




	Automotive			
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	<b>G8QN</b>	<b>G8QW</b>	<b>G8H</b>	<b>G8HN</b>
<b>Dimensions mm (in)</b>	14.4 H x 12.5 L x 16 W (0.56 x 0.49 x 0.63)	14.4 H x 25.5 L x 16 W (0.56 x 1.00 x 0.63)	25 H x 28 L x 28 W (0.98 x 1.10 x 1.10)	25.4 H x 28.5 L x 28.5 W (1.00 x 1.12 x 1.12)
<b>Switching</b>	30 A max.	30 A max.	35 A max.	35 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Miniature automotive high performance single PCB relay</li> <li>• Fully sealed construction</li> <li>• Fully automated assembly</li> <li>• Suitable for reverse motor applications (2 relays)</li> <li>• Made in USA</li> </ul>	<ul style="list-style-type: none"> <li>• Miniature automotive high performance dual PCB relay</li> <li>• Fully sealed construction</li> <li>• Fully automated assembly</li> <li>• Perfect for reverse motor applications</li> <li>• Made in USA</li> </ul>	<ul style="list-style-type: none"> <li>• General purpose automotive power relay</li> <li>• Mini ISO footprint</li> <li>• Handles heavy automotive load</li> <li>• High current path fully welded; reduces heat buildup at full load</li> <li>• Wide temperature range: -40°C to + 125°C</li> <li>• Made in North America</li> </ul>	<ul style="list-style-type: none"> <li>• General purpose automotive power relay</li> <li>• Mini 280 footprint</li> <li>• Handles heavy automotive load</li> <li>• High current path fully welded; reduces heat buildup at full load</li> <li>• Wide temperature range: -40°C to + 125°C</li> <li>• Made in North America</li> </ul>
<b>Contact Ratings</b>				
<b>Contact form</b>	1 Form C	2 Form C	1 Form C	1 Form A, 1 Form C
<b>Standard contact type</b>	Single button	Single button	Single Button	Single Button
<b>Standard contact material</b>	AgSnO	AgSnO	AgSnIn	–
<b>Max. operating current</b>	30 A (at 20°C for 1 hour)	30 A (at 20°C for 1 hour)	35 A (NO) / 20 A (NC)	35 A (NO) / 20 A (NC)
<b>Max. operating voltage</b>	16 VDC	16 VDC	16 VDC	16 VDC
<b>Minimum permissible load</b>	100 mA	100 mA	–	–
<b>Rated load</b>	10 A carry current at 85°C 30 A inrush current at 16 VDC	10 A carry current at 85°C 30 A inrush current at 16 VDC	35 A (NO) / 20 A (NC) carry current 100 A (NO) / 40 A (NC) inrush current	35 A (NO) / 20 A (NC) carry current 100 A (NO) / 20 A break (NO)
<b>Coil Ratings</b>				
<b>Coil voltage</b>	12 VDC	12 VDC	12 VDC	12 VDC
<b>Power consumption</b>	685 mW	685 mW	1.85 W	–
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	1.0 mA max. leakage at 440 VAC, 60 Hz for 1 minute between coil and contacts and between N.O and N.C. contacts	1.0 mA max. leakage at 440 VAC, 60 Hz for 1 minute between coil and contacts and between N.O and N.C. contacts	800 VDC for 1 minute	–
<b>Electrical service life (operations)</b>	100,000 operations min. (load dependent)	100,000 operations min. (load dependent)	100,000 operations min. (14 V / 35 A)	100,000 operations min. (14 V / 35 A)
<b>Terminal choices</b>	PCB	PCB	Plug-in	Plug-in
<b>Accessories</b>	N/A	N/A	N/A	N/A
<b>Approved standards</b>	N/A	N/A	N/A	N/A




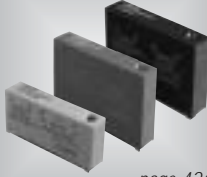

	Automotive	
	 <i>page 320</i>	 <i>page 334</i>
	G8JN	G8W
<b>Dimensions mm (in)</b>	26 H x 15.5 L x 23 W (1.02 x 0.61 x 0.91)	SPST: 26.0 H x 15.3 L x 22.8 W (1.02 x 0.60 x 0.88) SPDT: 26.8 H x 15.5 L x 23 W (1.06 x 0.61 x 0.91)
<b>Max. switching current</b>	60 A max.	60 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Micro ISO automotive relay</li> <li>• Choice of PCB or plug-in types</li> <li>• Fully automated assembly</li> <li>• Wide temperature range: -40°C to +125°C</li> <li>• Environment-friendly</li> <li>• Light weight</li> <li>• Made in USA</li> </ul>	<ul style="list-style-type: none"> <li>• Micro ISO automotive relay</li> <li>• Lower power consumption than G8H</li> <li>• Plug-in types</li> <li>• Fully automated assembly</li> <li>• Wide temperature range: -40°C to +125°C</li> <li>• Environment-friendly</li> <li>• Light weight</li> <li>• Made in USA</li> </ul>
<b>Contact Ratings</b>		
<b>Contact form</b>	1 Form A, 1 Form C	1 Form A, 1 Form C
<b>Standard contact type</b>	Single button	Single button
<b>Standard contact material</b>	AgSnO	AgSnO
<b>Max. operating current</b>	20 A (NO) / 10 A (NC)	20A (NO) / 10 A (NC)
<b>Max. operating voltage</b>	16 VDC	16 VDC
<b>Minimum permissible load</b>	1 A	1 A
<b>Rated load</b>	20 A (NO) / 10 A (NC) steady 60 A (NO) / 30 A (NC) inrush	20 A (NO) / 10 A (NC) steady 60 A (NO) / 30 A (NC) inrush
<b>Coil Ratings</b>		
<b>Coil voltage</b>	12 VDC	12 VDC
<b>Power consumption</b>	1440 mW	1309 mW
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	1.0 mA max. leakage at 500 VAC, 50-60 Hz for 1 minute between coil and contacts and between contacts	1.0 mA max. leakage at 440 VAC, 50-60 Hz for 1 minute between coil and contacts and between contacts (10 MOhm min. for SPST)
<b>Electrical service life (operations)</b>	100,000 operations min. (load dependent)	100,000 operations min. (load dependent)
<b>Terminal choices</b>	Plug-in or PCB	Plug-in
<b>Accessories</b>	N/A	N/A
<b>Approved standards</b>	N/A	N/A

	Flashers
	 <i>page 324</i>
	G8QFL
<b>Dimensions mm (in)</b>	23.6 H x 26.3 L x 26.3 W (0.93 x 1.04 x 1.04) (G8QFL-3); 43 H x 32.3 L x 32 W (1.69 x 1.27 x 1.26) (G8QFL-3-HD, G8QFL-5)
<b>Max. load</b>	120 W (G8QFL-3, G8QFL-5); 190 W (G8QFL-3-HD)
<b>Features</b>	<ul style="list-style-type: none"> <li>• 6 lamp flasher, models G8QFL-3 and G8QFL-5;</li> <li>• 8 lamp flasher, model G8QFL-3-HD</li> <li>• Heavy duty, high temperature enclosure</li> <li>• Unique design senses lamp outage</li> <li>• Handles high inrush of incandescent bulbs</li> </ul>
<b>Flash rate</b>	85 cpm
<b>Voltage drop</b>	0.8 VDC at 120 W (G8QFL-3, G8QFL-5); 0.8 VDC at 190 W (G8QFL-3-HD)
<b>Supply voltage</b>	12 VDC
<b>Activation/supply voltage (min.)</b>	9.0 VDC
<b>Activation/supply voltage (max.)</b>	24 V up to 1 minute
<b>Operating temperature</b>	-40°C to +85°C
<b>Electrical service life (operations)</b>	1,000,000 operations min.
<b>Terminal choices</b>	JIS/JASO 3 Terminal Relay (G8QFL-3); ISO 3 Terminal Relay (G8QFL-3-HD); ISO 5 Terminal Relay (G8QFL-5)
<b>Accessories</b>	N/A
<b>Approved standards</b>	FMVSS 108


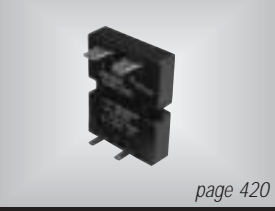


General Purpose			
	 <i>page 404</i>	 <i>page 382</i>	 <i>page 390</i>
	<b>MY4H</b>	<b>MK</b>	<b>MY</b>
<b>Dimensions mm (in)</b>	35 H x 28.5 L x 22 W (1.38 x 1.12 x 0.87) max.	52.58 H x 34.54 L x 34.54 W (2.07 x 1.36 x 1.36)	36 H x 28 L x 21.5 W (1.42 x 1.10 x 0.85)
<b>Switching</b>	3 A max.	10 A max.	10 A max. (2 pole); 5 A max. (4 pole)
<b>Features</b>	<ul style="list-style-type: none"> <li>Fully hermetically sealed for hazardous locations</li> <li>UL Class I, Division II approved (MY4ZH)</li> <li>Cadmium-free contacts</li> <li>Models with bifurcated contacts also available</li> </ul>	<ul style="list-style-type: none"> <li>Octal base plug-in</li> <li>Exceptional reliability</li> <li>Push-to-test button standard</li> </ul>	<ul style="list-style-type: none"> <li>Ideal for sequence control and power switching applications</li> <li>Name plate and mechanical indicator standard</li> <li>Variations include push-to-test, LED and bifurcated contacts</li> <li>Hermetic version available (MY4H)</li> </ul>
<b>Contact Ratings</b>			
<b>Contact form</b>	4 Form C	2 Form C, 3 Form C	2 Form C, 4 Form C
<b>Contact type</b>	Single button, bifurcated button	Single button	Single button, bifurcated button
<b>Contact material</b>	Ag Alloy	Ag	AgNi
<b>Max. operating current under resistive load</b>	3 A	10 A	10 A (DPDT); 5 A (4PDT)
<b>Max. operating voltage</b>	125 VAC, 125 VDC	250 VAC, 250 VDC	250 VAC, 125 VDC
<b>Max. switching capacity under resistive load</b>	330 VA, 72 W	2 pole: 2,500 VA, 280 W; 3 pole: 2,500 VA/1,250 VA 280 W	2 pole: 2,500 VA, 300 W; 4 pole: 1,250 VA, 150 W
<b>Minimum permissible load</b>	100 $\mu$ A, 1 VDC1 for MY4H 100 $\mu$ A 100 mVDC for MY4ZH (Bifurcated)	100 mA, 1 VDC	2 pole: 1 mA, 5 VDC; 4 pole: 1 mA, 1 VDC
<b>Rated load (under resistive load)</b>	3 A at 110 VAC, 3 A at 24 VDC (p.f.=1)	2 pole: 10 A at 250 VAC, 28 VDC; 3 pole: 10 A at 250 VAC, 28 VDC	2 pole: 5 A at 250 VAC, 30 VDC; 4 pole: 3 A at 250 VAC, 30 VDC
<b>Coil Ratings</b>			
<b>Coil voltage</b>	12, 24 VDC; 12, 24, 110/120 VAC	12, 24, 110/120, 220/240 VAC; 12, 24, 48, 100 VDC	6, 12, 24, 48, 110/120, 220/240 VAC; 6, 12, 24, 48, 100/110 VDC
<b>Power consumption</b>	330 VA, 72 W	2.7 VA, 1.5 W	Approx. 1.1 VA, 0.9 W
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	1,000 VAC, 1 minute between coil and contacts; 1,000 VAC, 1 minute between contacts of different polarity; 700 VAC, 1 minute between contacts of same polarity	2,000 VAC	2,000 VAC
<b>Electrical service life (operations)</b>	100,000 minimum	100,000 minimum	2P 500,000 at 5 A, 100,000 at 10 A; 4P 500,000 at 3 A, 100,000 at 5 A
<b>Terminal choices</b>	Plug-in	Plug-in	PCB terminal, plug-in
<b>Accessories</b>	PYF14A-E	Sockets and clips for track mounted sockets with screw terminals and back connecting sockets with solder and PCB terminals	Sockets and clips for track mounted sockets with screw terminals and back connecting sockets with solder and PCB terminals Note: PYF-S series screwless clamp terminal socket available
<b>Approved standards</b>	UL/CSA	UL, CSA, TUV, VDE	UL, CSA, SEV, CE, VDE

General Purpose			
	 page 356	 data sheet available at <a href="http://www.knowledge.omron.com">www.knowledge.omron.com</a>	 page 338
	LY	G4B	G7J
<b>Dimensions mm (in)</b>	35.56 H x 27.94 L x 21.59 W (1.40 x 1.10 x 0.85)	28.96 H x 50.8 L x 32.51 W (1.14 x 2 x 1.28)	64 H x 53.5 L x 34.5 W (2.52 x 2.11 x 1.36)
<b>Switching</b>	15 A max.	25 A max.	25 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Compact power relay</li> <li>• LED, Push-to-test button, bifurcated contacts and other features available</li> </ul>	<ul style="list-style-type: none"> <li>• Breaks 15 A, carries 20 A and withstands 55 A inrush</li> <li>• 25 A high capacity and Class B insulation types available.</li> </ul>	<ul style="list-style-type: none"> <li>• Ideal for 3 phase motor control</li> <li>• 4 pole mini contactor</li> <li>• DIN rail mountable</li> </ul>
<b>Contact Ratings</b>			
<b>Contact form</b>	1 Form C, 2 Form C, 3 Form C, 4 Form C	SPST-NO, SPDT	4 Form A, 3 FormA/1 Form B, 2 Form A/2 Form B
<b>Contact type</b>	Single button	Single button	Single button
<b>Contact material</b>	AgCdO	AgCdO or AgInSn	AgCdO
<b>Max. operating current under resistive load</b>	15 A (SPDT); 10 A (DPDT, 3PDT, 4PDT)	15 A, 25 A (high capacity)	25 A (NO contacts), 8 A (NC contacts)
<b>Max. operating voltage</b>	250 VAC, 125 VDC	250 VAC, 125 VDC	250 VAC, 125 VDC
<b>Max. switching capacity under resistive load</b>	1 pole: 1,700 VA, 360 W; 2, 3, 4 poles: 1,100 VA, 240 W	3,300 VA, 360 W 5,500 VA, 600 W	5,500 VA (NO contacts), 1,760 VA (NC contacts)
<b>Minimum permissible load</b>	100 mA, 5 VDC	100 mA, 5 VDC	100 mA, 24 VDC
<b>Rated load (under resistive load)</b>	1 pole: 15 A at 110 VAC, 24 VDC; 2, 3, 4 pole: 10 A at 110 VAC, 24 VDC	15 A at 220 VAC, 24 VDC; 25 A at 220 VAC, 24 VDC	25 A at 220 VAC (NO contacts); 8 A at 220 VAC (NC contacts)
<b>Coil Ratings</b>			
<b>Coil voltage</b>	12, 24, 110/120, 220/240 VAC, 12, 24, 48, 100 VDC	6, 12, 24, 50, 100, 120 VAC, 6, 12, 24, 48, 100, 110 VDC	12, 24, 100/120, 200/240 VAC; 12, 24, 48, 100 VDC
<b>Power consumption</b>	1.1 VA, 0.9 W (1 pole); 1.1 VA, 0.9 W (DPDT); 1.6 VA, 1.4 W (3PDT); 1.95 VA, 1.5 W (4PDT)	(At 60 Hz for AC) 1.3 VA, 1.2 W	1.8 to 2.6 VA, 2.0 W
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	2,000 VAC	2,000 VAC	4,000 VAC
<b>Electrical service life (operations)</b>	200,000 minimum, 500,000 minimum (2P)	100,000 minimum	100,000 minimum
<b>Terminal choices</b>	Track mounted sockets PCB terminal, plug-in	Quick-connect, PCB, combination PCB + QC	Quick-connect, screw, PCB
<b>Accessories</b>	Sockets and clips for track mounted sockets with screw terminals and back connecting sockets with solder and PCB terminals	–	R99-04 for G5F
<b>Approved standards</b>	UL, CSA, SEV, VDE, CE	UL, CSA	UL, CSA, TUV, CE

	General Purpose		
	 <i>page 344</i>	 <i>page 370</i>	 <i>page 374</i>
	<b>G7L</b>	<b>MGN</b>	<b>MJN</b>
<b>Dimensions mm (in)</b>	49.02 H x 68.58 L x 34.54 W (1.93 x 2.70 x 1.36)	Short Base: 55.88 H x 63.50 L x 63.50 W (2.20 x 2.50 x 2.50) Long Base: 60.45 H x 84.33 L x 63.50 W (2.38 x 3.32 x 2.50)	48.38 H x 35.56 L x 38.73 W (1.91 x 1.40 x 1.53)
<b>Switching</b>	30 A max.	30 A max.	30 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Low cost, high power relay</li> <li>• 3mm contact gap</li> <li>• Conforms to IEC 950/UL 1950</li> <li>• Class B insulation standard</li> </ul>	<ul style="list-style-type: none"> <li>• 30 Amp heavy duty power relay</li> <li>• Class F coil insulation system for 155°C (311°F) total temperature</li> <li>• Coil molded in DuPont Rynite® for environmental protection</li> <li>• Rugged construction rivets terminals to base</li> </ul>	<ul style="list-style-type: none"> <li>• Rugged power driver offers superior 3/16" through-air and 3/8" over-surface spacing</li> <li>• Interlocked frame and contact block prevent contact misalignment during plug-in</li> <li>• Open or dust covered available with indicator lamps and push-to-operate buttons</li> </ul>
<b>Contact Ratings</b>			
<b>Contact form</b>	1 Form A-DM, 2 Form A-DM	–	1 Form C, 2 Form C, 3 Form C (non-latching); 1 Form C, 2 Form C (latching/unlatching)
<b>Contact type</b>	Single button	Single button	Single button
<b>Contact material</b>	AgCdO	5/16" diameter AgCdO	3/16" diameter AgCdO
<b>Max. operating current under resistive load</b>	30 A (SPST-NO), 25 A (DPST-NO)	–	–
<b>Max. operating voltage</b>	250 VAC	–	–
<b>Max. switching capacity under resistive load</b>	1 pole : 6,600 VAC; 2 pole: 5,500 VAC	–	–
<b>Minimum permissible load</b>	100 mA, 5VDC	–	–
<b>Rated load (under resistive load)</b>	1 pole: 30 A at 250 VAC; 2 pole: 25 A at 220 VAC	30 A or 1-1/2 HP at 120 or 240 VAC; 2 HP at 240 VAC; 3,600 W at 120 or 240 VAC (ballast); 30 A at 240 VAC, 100,000 cycle (resistive), 20 A at 600 VAC; 30 A at 28 VDC	10 A at 28 VDC and 120/240 VAC at 80% pf; 1/3 HP at 120 VAC; 1/2 HP at 277/240/480/600 VAC 36 LRA-8.5FLA at 18 VDC; 3 A at 480/600 VAC at 80% pf; 10 A at 277 VAC resistive; 20 A at 28 VDC and 120/240/277 VAC; 10 A at 480/600 VAC; 3/4 HP at 120 VAC; 1-1/2 HP at 240 VAC, 17 FLA, 65 LRA, 300 VDC; 30 A at 28 VDC; 15 A at 480/600 VAC; 1 HP at 120 VAC; 1-1/2 at 240 VAC
<b>Coil Ratings</b>			
<b>Coil voltage</b>	12, 24, 100/120, 200/240 VAC; 12, 24, 48, 100 VDC	6, 12, 24, 120, 240, 480 VAC; 6, 12, 24, 48, 110 VDC	6, 12, 24, 120, 240 VAC; 5, 6, 24, 48, 110 VDC
<b>Power consumption</b>	1.7 to 2.5 VA, 1.9 W	9.5 VA nominal (AC); 2 W nominal (DC)	Latching/Non-latching AC 1.7 VA nominal (1, 2PDT); 2.0 VA (3PDT) Non-latching DC 1.2 W nominal
<b>Dielectric strength (50/60 Hz for 1 minute)</b>	4,000 VAC	2200 VRMS, 60 Hz between contacts; 2200 VRMS, 60 Hz between other elements	Greater than 750 VAC, RMS 60 Hz across open contacts; greater than 2500 VAC, RMS 60 Hz all other mutually insulated elements
<b>Electrical service life (operations)</b>	100,000 minimum	100,000 minimum	100,000 minimum
<b>Terminal choices</b>	Quick-connect, screw, PCB	Screw type	Quick connect
<b>Accessories</b>	R99-07G5D E bracket; P7LF-D adapter; P7LF-06 front connecting socket	Dust Cover - sealed knock-out holes for standard conduit fittings. Relay mounts on pre-drilled base. Constructed of aluminum. Snap action cover release 127 W x 76.20 H x 101.60 D (5 x 3 x 4)	PTF11PC Socket; PTF11QDC Socket; PTF21PC Socket; PTFPCB Socket; PYMJN-PCB Hold Down Springs; PYMJN-S Hold Down Springs
<b>Approved standards</b>	UL, CSA, VDE, CE	UL recognized	UL, CSA

Solid State					
	 page 430	 page 434	 page 440	 page 426	 data sheet available at <a href="http://www.knowledge.omron.com">www.knowledge.omron.com</a>
	<b>G3MB</b>	<b>G3MC</b>	<b>G3R I/O</b>	<b>G3M</b>	<b>G3TB</b>
<b>Dimensions mm (in)</b>	20.5 H x 24.5 L x 5.5 W (0.81 x 0.96 x 0.22)	13.5 H x 24.5 L x 4.5 W (0.53 x 0.96 x 0.18)	Input & Output modules: 28 H x 29 L x 13 W (1.10 x 1.14 x 0.51)	20 H x 40 L x 9 W (0.79 x 1.58 x 0.35)	Input module: 20.5 H x 43.5 L x 10 W (0.81 x 1.70 x 0.39) Output module: 30.5 H x 43.5 L x 10 W (1.20 x 1.70 x 0.39)
<b>Max. switching</b>	2 A	2 A	Input module: 100 mA; Output module: 2A	3 A	Input module: 25 mA; Output module: 3 A
<b>Features</b>	<ul style="list-style-type: none"> <li>Space-saving SIP design</li> <li>Industry standard footprint</li> <li>Ideal for high density PCB applications</li> </ul>	<ul style="list-style-type: none"> <li>Fail safe technology</li> <li>Thin profile</li> <li>Ideal for close PCB mounting</li> </ul>	<ul style="list-style-type: none"> <li>4 kV insulation</li> <li>Operation indicator standard</li> <li>Interchangeable with G2R electromechanical relay</li> <li>Ideal for DIN rail mount I/O operations</li> </ul>	<ul style="list-style-type: none"> <li>Multi-input SSR</li> <li>Space-saving SIP design</li> <li>Ideal for high density Power PCB applications</li> </ul>	<ul style="list-style-type: none"> <li>Color-coded modules</li> <li>Industry standard footprint</li> <li>4 kV dielectric strength</li> </ul>
<b>Operating input</b>	5, 12, 24 VDC	5, 12, 24 VDC	Input module: 5 VDC; 6.6-32 VDC; 60-264 VAC; Output module: 4-32 VDC	5, 12, 24 VDC	Input module: 80-264 VAC, 3-32 VDC; Output module: 3-32 VDC
<b>Output voltage</b>	75-264 VAC	75-264 VAC	Input module: 4-32 VDC; Output module: 75-264 VAC, 4-200 VDC	75-264 VAC	Input module: 4-32 VDC; Output module: 75-264 VAC, 4-200 VDC
<b>Isolation</b>	Phototriac	Phototriac	Photocoupler, Phototriac	Phototriac	Photocoupler
<b>Dielectric</b>	2,500 VAC	2,500 VAC	4,000 VAC	2,500 VAC	4,000 VAC
<b>Zero crossing</b>	Yes	Yes	Input module: No; Output module: Yes	Yes	Input module: No; Output module: Yes
<b>Snubber circuit</b>	Yes	Yes	Input module: No; Output module: Yes	Yes	Input module: No; Output module: Yes
<b>Life (MTTF)</b>	100,000 hours	100,000 hours	100,000 hours	100,000 hours	100,000 hours
<b>Mounting</b>	PCB	PCB	Socket	PCB	PCB
<b>Terminal</b>	PCB	PCB	Plug-in	PCB	PCB
<b>Approvals</b>	UL, CSA, TUV	UL, CSA	UL, CSA, TUV	UL, CSA, TUV	UL, CSA
<b>Equivalent Omron EMR footprint</b>	N/A	N/A	G2R	N/A	N/A
<b>Optional heat sink</b>	N/A	N/A	N/A	N/A	N/A
<b>Socket</b>	N/A	N/A	P2RF-05E	N/A	N/A



	Solid State			
	 <b>G3TC</b> <i>page 450</i>	 <b>G3NE</b> <i>page 420</i>	 <b>G3NA</b> <i>page 410</i>	 <b>G3PB</b> <i>data sheet available at www.knowledge.omron.com</i>
<b>Dimensions mm (in)</b>	31.8 H x 43.2 L x 15.2 W (1.25 x 1.7 x 0.6)	11.5 H x 47 L x 37.5 W (0.45 x 1.90 x 1.50)	27 H x 58 L x 43 W (1.06 x 2.28 x 1.69)	Consult Omron for specific model
<b>Switching</b>	Input Module: 12 mA, 15 mA, or 18 mA (depending on model) Output Module: 3 A (1 A on DC output models rated up to 200 VDC)	20 A max.	40 A max.	45 A max.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Color-coded modules</li> <li>• Industry standard footprint</li> <li>• Built-in hold down screw</li> <li>• Optical isolation – Dielectric strength of 4 kV</li> <li>• Zero cross on AC output modules</li> </ul>	<ul style="list-style-type: none"> <li>• High capacity</li> <li>• Panel mount</li> <li>• Quick-connect terminals</li> </ul>	<ul style="list-style-type: none"> <li>• Ideal for industrial controls</li> <li>• Hockey puck design</li> <li>• Operation indicator standard</li> </ul>	<ul style="list-style-type: none"> <li>• Available with or without built-in heat sink</li> <li>• 3-phase or single phase models</li> <li>• DIN rail mountable</li> </ul>
<b>Operating input</b>	Input Module: 90-140 VDC/AC, 180-280 VDC/AC, 10-32 VDC/AC (depending on model) Output Module: 5-24 VDC (depending on model)	5, 12, 24 VDC	4-32 VDC; 75-264 VAC	10 mA max
<b>Output voltage</b>	Input Module: 4.5-6 VDC, 12-18 VDC, 20-30 VDC (depending on model) Output Module: 75-140 VAC, 75-280 VAC, 5-60 VDC, 5-200 VDC (Depending on model)	75-264 VAC	19-528 VAC; 5-200 VDC	12-24 VDC
<b>Isolation</b>	AC Input, DC Input, DC Output: Photocoupler AC Output: Phototriac	Phototriac	Phototriac, Photocoupler	Phototriac
<b>Dielectric</b>	4,000 VAC	2,000 VAC	2,500 VAC	2,500 VAC, 50/60 Hz
<b>Zero crossing</b>	Yes (AC output modules only)	Yes	Yes	Yes
<b>Snubber circuit</b>	Yes (AC output modules only)	Yes	Yes	Yes
<b>Life (MTTF)</b>	100,000	100,000 hours	100,000 hours	100,000 hours
<b>Mounting</b>	PCB	Plug-in	Panel	DIN rail
<b>Terminal</b>	PCB	Quick connect	Screw	Screw
<b>Approvals</b>	UL, CSA, TUV, CE	UL, CSA, TUV	UL, CSA, TUV	UL, UL508, CSA, CE
<b>Equivalent Omron EMR footprint</b>	N/A	N/A	N/A	N/A
<b>Optional heat sink</b>	N/A	Y92B-N50, -N100	Y92B-A100, -A150N, -A250	Y92B-P50 (depending on model)
<b>Socket</b>	N/A	N/A	N/A	N/A

# SOCKET SELECTION - QUICK REFERENCE CHART

**Note:** \* denotes normally stocked item.

Relay type	Track mount sockets		Back connecting sockets						Page
			Solder terminals		PCB terminals		Wire wrap terminals		
	Socket	Clip	Socket	Clip	Socket	Clip	Socket	Clip	
G2R-1-S	P2RF-05	---	P2R-05A	---	P2R-05P*	---	---	---	216
	P2RF-05-E*	---		---		---			
	P2RF-05-S	P2CM-S		---		---			
G2R-2-S	P2RF-08	---	P2R-08A	---	P2R-08P*	---	---	---	217
	P2RF-08-E*	---		---		---			
	P2RF-08-S	P2CM-S		---		---			
G6B-1	---	---	---	---	P6B-04P*	P6B-C2	---	---	276
G6B-2	---	---	---	---	P6B-26P	P6B-C2	---	---	
G6BK	---	---	---	---	P6B-06P	P6B-C2	---	---	
G6BU	---	---	---	---	P6B-04P*	P6B-C2	---	---	
G6C-1, G6C-2	---	---	---	---	P6C-06P	---	---	---	
G6CK	---	---	---	---	P6C-08P	---	---	---	284
G6CU	---	---	---	---	P6C-06P	---	---	---	
LY1, LY2	PTF08A-E*	PYC-A1*	PT08*	PYC-P*	PT08-0*	PYC-P*	PT08QN	PYC-P*	
LY3	PTF11A*	PYC-A1*	PT11	PYC-P*	PT11-0*	PYC-P*	PT11QN	PYC-P*	356
LY4	PTF14A-E*	PYC-A1*	PT14*	PYC-P*	PT14-0*	PYC-P*	PT14QN	PYC-P*	
MK2	PFO83A-E*	PFC-A1*	PL08*	PLC-E*	PLE08-0*	PLC-10	PL08-Q*	PLC-E*	
MK3	PF113A-E*	PFC-A1*	PL11*	PLC-E*	PLE11-0*	PLC-10	PL11-Q*	PLC-E*	382
MY2	PYF08A-E	PYC-A1*	PY08*	PYC-P*	PY08-02	PYC-P*	PY08QN	PYC-P*	
	PYF08A-N	PYC-E1**							
	PYF08-S	PYCM-08S							
MY3	PYF11A*	PYC-A1*	PY11*	PYC-P*	PY11-02	PYC-P*	PY11QN	PYC-P*	(See note 3)
MY4	PYF14A-E	PYC-A1*	PY14*	PYC-P*	PY14-02*	PYC-P*	PY14QN*	PYC-P*	390
	PYF14A-N	---							
	PYF14S	PYCM-14S							
MY2K	PYF14A-E*	PYC-A1*	PY14*	PYC-P*	PY14-02*	PYC-P*	PY14QN*	PYC-P*	(See note 3)
MY4(Z)H	PYF14-A-E	PYC-A1*	---	---	---	---	---	---	404

**Note: 1.** \*\* 2 pole test button type relays.

**2.** -E and -N models are of finger-protect construction. Round terminals cannot be used. Use Y-shaped terminals

**3.** Please contact your local Omron representative for current information on this product..

Relay type	Mounting	Adapter	Front connecting socket	Page
Bracket	Track mount / Panel mount		Track mount / Panel mount	
G7J-(All)	R99-04-FOR-G5F	---	---	338
G7L-1A-T	R99-07G5D	P7LF-D	P7LF-06	344
G7L-1A-TJ			P7LF-06	
G7L-1A-B			---	
G7L-1A-BJ			---	
G7L-2A-T			P7LF-06	
G7L-2A-TJ			P7LF-06	
G7L-2A-B			---	
G7L-2A-BJ			---	

Mounting track	Length	Page
PFP-100N*	1 meter	217, 232, 353, 357, 365, 382, 387, 396, 401, 411
PFP-50N*	.5 meter	217, 232, 353, 357, 365, 382, 387, 396, 401, 411

Mounting track accessories	Page
PFP-M*	Track end plate 217, 232, 353, 357, 365, 382, 387, 401, 411
PFP-S*	Track spacer 217, 232, 353, 357, 366, 396, 402, 411