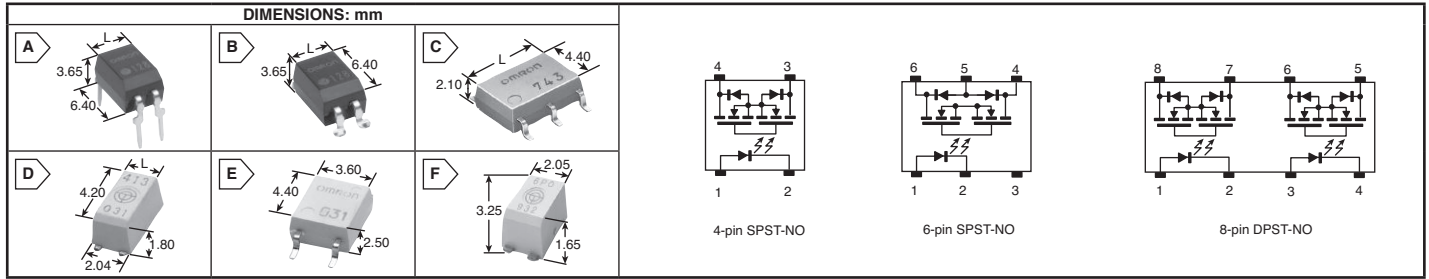


OMRON MOSFET Relays

OMRON
ELECTRONIC COMPONENTS



OMRON G3VM SERIES: MOSFET RELAYS WITH LOAD VOLTAGE 20-80V

Perfectly suited for Automated Test Equipment, Medical Equipment, Instrumentation, Security Equipment, Automated Meter Reading, Automotive Diagnostic Equipment, and Communications. Available in 1 and 2-Pole configurations in PCB, SMT, DIP, SOP, and SSOP packaging. Other options include current limiting, high dielectric voltage withstand, normally open and normally closed contact forms, high voltage and current load handling, and high-speed switching.

Features:

- Solid State performance and accuracy
- Smallest SSOP footprint in the industry (SSOP models)
- Low ON resistance (as low as 20mOhms)
- Low OFF state capacitance (as low as .45 pF)
- Low LED trigger current models (1mA)
- High speed switching
- 100,000 hours of continuous operation

*Fast On/Off .1ms/.15ms (typical) ** Full reel is 500 † Low LED trigger 1mA (maximum)



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Omron Part No.	Fig.	Dimension L (mm)	Package/ Pin Count	Terminals	Load Current	Voltage Withstand 1 Minute (VAC)	ON Resistance (typical)	Output OFF State Capacitance (typical)	Leakage Current (typical)	Price Each					
											1	25	50	100		
20V Load Voltage, SPST-NO Contact Form																
653-G3VM-21AR	G3VM-21AR	A	4.58	DIP4	PCB	3000mA	2500	40 mΩ	300 pF	1 μA (max.)	16.51	15.35	14.03	12.71		
653-G3VM-21DR	G3VM-21DR	B	4.58	DIP4	SMT	3000mA	2500	40 mΩ	300 pF	1 μA (max.)	16.64	15.48	14.14	12.81		
653-G3VM-21BR	G3VM-21BR	A	7.12	DIP6	PCB	4000mA	2500	20 mΩ	1000 pF	1 μA (max.)	17.48	16.25	14.86	13.46		
653-G3VM-21ER	G3VM-21ER	B	7.12	DIP6	SMT	4000mA	2500	20 mΩ	1000 pF	1 μA (max.)	17.57	16.34	14.94	13.53		
653-G3VM-21GR	G3VM-21GR	C	3.90	SOP4	SMT	160mA	1500	5 Ω	1 pF	0.2 nA	3.54	3.18	2.83	2.54		
653-G3VM-21GR1	G3VM-21GR1	C	3.90	SOP4	SMT	300mA	1500	1 Ω	5 pF	0.2 nA	3.81	3.53	3.36	3.00		
653-G3VM-21HR	G3VM-21HR	C	6.30	SOP6	SMT	2500mA	1500	0.02 Ω	1000 pF	2 nA	11.81	10.95	10.41	9.29		
* 653-G3VM-21LR10	G3VM-21LR10	D	1.90	SSOP4	SMT	200mA	1500	3 Ω	0.8 pF	0.01 nA	11.19	10.06	8.94	8.05		
653-G3VM-21LR1	G3VM-21LR1	D	1.70	SSOP4	SMT	450mA	1500	0.8 Ω	5 pF	0.2 nA	6.26	6.07	5.89	5.71		
** 653-G3VM-21LR1(TR05)	G3VM-21LR1(TR05)	D	1.70	SSOP4	SMT	450mA	1500	0.8 Ω	5 pF	0.2 nA	8.80	7.88	7.68	7.09		
653-G3VM-21LR11	G3VM-21LR11	D	1.90	SSOP4	SMT	900mA	1500	0.18 Ω	40 pF	0.2 nA	10.29	9.30	8.58	7.42		
40V Load Voltage, SPST-NO Contact Form																
653-G3VM-41AR	G3VM-41AR	A	4.58	DIP4	PCB	2500mA	2500	50 mΩ	300 pF	1 μA (max.)	16.99	15.80	14.44	13.08		
653-G3VM-41DR	G3VM-41DR	B	4.58	DIP4	SMT	2500mA	2500	50 mΩ	300 pF	1 μA (max.)	18.23	16.95	15.50	14.04		
653-G3VM-41BR	G3VM-41BR	A	7.12	DIP6	PCB	3500mA	2500	30 mΩ	1000 pF	1 μA (max.)	17.96	16.71	15.27	13.83		
653-G3VM-41ER	G3VM-41ER	B	7.12	DIP6	SMT	3500mA	2500	30 mΩ	1000 pF	1 μA (max.)	18.06	16.79	15.35	13.91		
653-G3VM-41GR6	G3VM-41GR6	C	3.90	SOP4	SMT	120mA	1500	10 Ω	1 pF	0.2 nA	3.54	3.18	2.83	2.54		
653-G3VM-41GR5	G3VM-41GR5	C	3.90	SOP4	SMT	300mA	1500	1 Ω	10 pF	0.2 nA	3.12	2.89	2.75	2.45		
653-G3VM-41GR8	G3VM-41GR8	C	3.90	SOP4	SMT	1000mA	1500	0.1 Ω	300 pF	0.2 nA	6.77	6.09	5.41	4.87		
653-G3VM-41HR	G3VM-41HR	C	6.30	SOP6	SMT	2500mA	1500	0.03 Ω	70 pF	10 nA (max.)	13.41	12.06	10.72	9.65		
* 653-G3VM-41LR10	G3VM-41LR10	D	1.90	SSOP4	SMT	120mA	1500	12 Ω	0.45 pF	0.01 nA	8.60	7.64	6.88	6.50		
** 653-G3VM-41LR5-TR05	G3VM-41LR5(TR05)	D	1.70	SSOP4	SMT	300mA	1500	1 Ω	10 pF	0.2 nA	8.81	8.59	8.16	7.27		
60V Load Voltage, SPST-NO Contact Form																
653-G3VM-61A1	G3VM-61A1	A	4.58	DIP4	PCB	500mA	2500	1 Ω	130 pF	1 nA	2.01	1.90	1.84	1.77		
653-G3VM-61AY	G3VM-61AY	A	4.58	DIP4	PCB	500mA	5000	0.6 Ω	130 pF	1 μA (max.)	7.55	6.42	5.29	4.76		
653-G3VM-61AR	G3VM-61AR	A	4.58	DIP4	PCB	2000mA	2500	80 mΩ	250 pF	1 μA (max.)	17.48	16.25	14.86	13.46		
653-G3VM-61DR	G3VM-61DR	B	4.58	DIP4	SMT	2000mA	2500	80 mΩ	250 pF	1 μA (max.)	17.57	16.34	14.94	13.53		
653-G3VM-61B1	G3VM-61B1	A	7.12	DIP6	PCB	500mA	2500	1 Ω	130 pF	1 nA	2.34	2.17	2.06	1.84		
653-G3VM-61BR1	G3VM-61BR1	A	7.12	DIP6	PCB	3000mA	2500	40 mΩ	1000 pF	1 μA (max.)	18.45	17.15	15.68	14.20		
653-G3VM-61ER1	G3VM-61ER1	B	7.12	DIP6	SMT	3000mA	2500	40 mΩ	1000 pF	1 μA (max.)	18.54	17.25	15.76	14.28		
653-G3VM-61D1	G3VM-61D1	B	4.58	SMD4	SMT	500mA	2500	1 Ω	130 pF	1 nA	2.34	2.17	2.06	1.84		
653-G3VM-61DY	G3VM-61DY	B	4.58	SMD4	SMT	500mA	5000	0.6 Ω	130 pF	1 μA (max.)	7.55	6.42	5.29	4.76		
653-G3VM-61E1	G3VM-61E1	B	7.12	SMD6	SMT	500mA	2500	1 Ω	130 pF	1 nA	2.43	2.25	2.14	1.91		
653-G3VM-61ER	G3VM-61ER	B	7.12	SMD6	SMT	2500mA	2500	0.065 Ω	400 pF	1 nA	9.06	8.40	7.99	7.12		
653-G3VM-61VY	G3VM-61VY	E	-	SOP4	SMT	70mA	3750	25 Ω	30 pF	1 nA	6.16	5.54	4.92	4.43		
653-G3VM-61G1	G3VM-61G1	C	3.90	SOP4	SMT	400mA	1500	1 Ω	130 pF	1 nA	2.20	2.11	2.02	1.96		
† 653-G3VM-61G2	G3VM-61G2	C	3.90	SOP4	SMT	400mA	1500	1 Ω	130 pF	1 nA	2.81	2.52	2.39	2.13		
653-G3VM61GR1	G3VM-61GR1	C	3.90	SOP4	SMT	1000mA	1500	0.25 Ω	90 pF	0.2 nA	5.36	4.82	4.28	3.85		
653-G3VM-61H1	G3VM-61H1	C	6.30	SOP6	SMT	400mA	1500	1 Ω	130 pF	1 nA	2.34	2.17	2.06	1.84		
653-G3VM-61HR	G3VM-61HR	C	6.30	SOP6	SMT	2300mA	1500	0.04 Ω	70 pF	10 nA (max.)	13.41	12.06	10.72	9.65		
653-G3VM-61LR	G3VM-61LR	D	1.90	SSOP4	SMT	400mA	1500	1 Ω	20 pF	0.04 nA	9.89	9.29	9.05	8.24		
653-G3VM-61PR	G3VM-61PR	F	-	USOP4	SMT	400mA	500	1 Ω	20 pF	1 nA (max.)	15.98	14.86	12.30	6.71		
60V Load Voltage, DPST-NO Contact Form																
653-G3VM-62C1	G3VM-62C1	A	9.66	DIP8	PCB	500mA	2500	1 Ω	130 pF	1 nA	4.20	3.77	3.35	3.02		
653-G3VM-62F1	G3VM-62F1	B	9.66	SMD8	SMT	500mA	2500	1 Ω	130 pF	1 nA	4.20	3.77	3.35	3.02		
653-G3VM-62J1	G3VM-62J1	C	9.40	SOP8	SMT	400mA	1500	1 Ω	130 pF	1 nA	4.98	4.84	4.60	4.10		
80V Load Voltage, SPST-NO Contact Form																
653-G3VM-81GR	G3VM-81GR	C	3.90	SOP4	SMT	40mA	1500	16 Ω	2.5 pF	0.5 nA	7.62	6.86	6.09	5.48		
653-G3VM-81GR1	G3VM-81GR1	C	3.90	SOP4	SMT	200mA	1500	5 Ω	6.5 pF	0.5 nA	7.62	6.86	6.09	5.46		
653-G3VM-81G1	G3VM-81G1	C	3.90	SOP4	SMT	350mA	1500	1 Ω	30 pF	0.2 nA	6.16	5.54	4.92	4.43		
653-G3VM-81HR	G3VM-81HR	C	6.30	SOP6	SMT	1200mA	1500	0.11 Ω	460 pF	1.2 nA	9.57	8.88	8.44	7.53		
* 653-G3VM-81LR	G3VM-81LR	D	1.90	SSOP4	SMT	120mA	1500	7.5 Ω	5 pF	0.1 nA	9.80	8.83	8.38	8.11		

Omron Solid State Relays