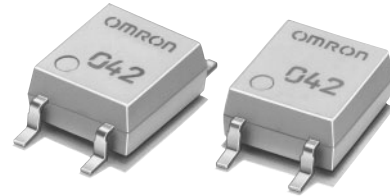


MOS FET Relays

G3VM-353G/G1

Analog-switching MOS FET Relay with SPST-NC (Single-pole, Single-throw, Normally Closed) Contacts General-purpose Series Added

- New models with SPST-NC contacts and a 4-pin SOP package now included in 350-V load voltage series.
- Continuous load current of 120 mA (90 mA).
- Dielectric strength of 1,500 Vrms between I/O.
- General-purpose series (high ON-resistance) added.



NEW

Note: The actual product is marked differently from the image shown here.

Caution

Refer to "Common Precautions" on page 2.

Application Examples

- Broadband systems
- Measurement devices
- Data loggers
- Amusement machines

List of Models

Contact form	Terminals	Load voltage (peak value)	Model	Minimum packaging unit	
				Number per stick	Number per tape
SPST-NC	Surface-mounting terminals	350 V AC	G3VM-353G	100	---
			G3VM-353G1		
			G3VM-353G (TR)	---	2,500
			G3VM-353G1 (TR)		

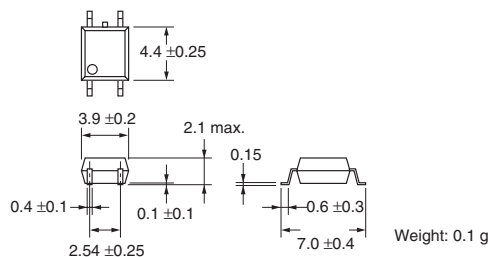
Dimensions

Note: All units are in millimeters unless otherwise indicated.

G3VM-353G/G1

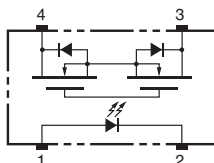


Note: The actual product is marked differently from the image shown here.



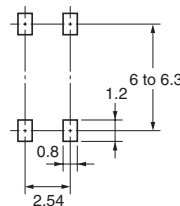
Terminal Arrangement/Internal Connections (Top View)

G3VM-353G/G1



Actual Mounting Pad Dimensions (Recommended Value, Top View)

G3VM-353G/G1



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	Unit	Measurement Conditions
Input	LED forward current	I_F	50	mA
	Repetitive peak LED forward current	I_{FP}	1	A
	LED forward current reduction rate	$\Delta I_F/^\circ C$	-0.5	mA/°C
	LED reverse voltage	V_R	5	V
	Connection temperature	T_J	125	°C
Output	Output dielectric strength	V_{OFF}	350	V
	Continuous load current	I_O	120 (90)	mA
	ON current reduction rate	$\Delta I_{ON}/^\circ C$	-1.2 (-0.9)	mA/°C
Dielectric strength between input and output (See note 1.)				
Operating temperature				
Storage temperature				
Soldering temperature (10 s)				

Note 1. The dielectric strength between the input and output was checked by applying voltage between all pins as a group on the LED side and all pins as a group on the light-receiving side.

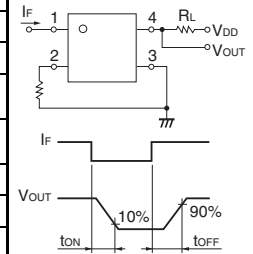
Values inside parentheses () are for G3VM-353G1.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Minimum	Typical	Maximum	Unit	Measurement conditions
Input	LED forward voltage	V_F	1.0	1.15	1.3	V
	Reverse current	I_R	---	---	10	μA
	Capacity between terminals	C_T	---	30	---	pF
	Trigger LED forward current	I_{FC}	---	1	3	mA
Output	Maximum resistance with output ON	R_{ON}	---	15 (30)	25 (50)	Ω
	Current leakage when the relay is open	I_{LEAK}	---	---	1.0	μA
Capacity between I/O terminals						
Insulation resistance						
Turn-ON time						
Turn-OFF time						

Values inside parentheses () are for G3VM-353G1.

Note 2. Turn-ON and Turn-OFF Times



Recommended Operating Conditions

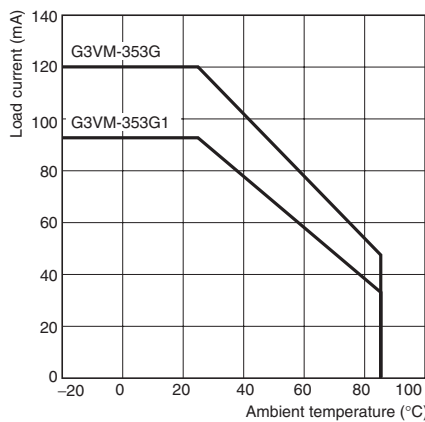
Use the G3VM under the following conditions so that the Relay will operate properly.

Item	Symbol	Minimum	Typical	Maximum	Unit
Output dielectric strength	V_{DD}	---	---	280	V
Operating LED forward current	I_F	5	---	25	mA
Continuous load current	I_O	---	---	120 (90)	mA
Operating temperature	T_a	-20	---	65	°C

Values inside parentheses () are for G3VM-353G1.

Engineering Data

Load Current vs. Ambient Temperature
G3VM-353G/G1



Safety Precautions

Refer to page 2 for precautions common to all G3VM models.