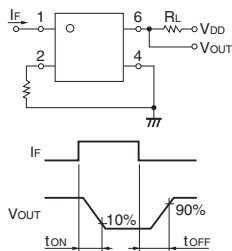


■Electrical Characteristics (Ta = 25°C)

Item			Symbol	G3VM-401BY G3VM-401EY	G3VM-601BY G3VM-601EY	Unit	Measurement conditions	
Input	LED forward voltage		V _F	Minimum	1		V	I _F =10 mA
				Typical	1.15			
				Maximum	1.3			
	Reverse current		I _R	Maximum	10		μA	V _R =5 V
	Capacitance between terminals		C _T	Typical	30		pF	V=0, f=1 MHz
Output	Maximum resistance with output ON		R _{ON}	Typical	—	1.6	mA	I _O =Continuous load current ratings
					3	5		
			Maximum	17	30 (25)	Ω	G3VM-401BY/EY : I _F = 5 mA, I _O =120 mA G3VM-601BY/EY : I _F =10 mA, I _O =100 mA Values in parentheses are for t < 1 s.	
				11	23		G3VM-401BY/EY : I _F = 5 mA, I _O =120 mA G3VM-601BY/EY : I _F =10 mA, I _O =100 mA	
6				12	G3VM-401BY/EY : I _F = 5 mA, I _O =240 mA G3VM-601BY/EY : I _F =10 mA, I _O =200 mA			
Maximum	35	45 (35)	G3VM-401BY/EY : I _F = 5 mA, I _O =120 mA G3VM-601BY/EY : I _F =10 mA, I _O =100 mA Values in parentheses are for t < 1 s.					
	20	35	G3VM-401BY/EY : I _F = 5 mA, I _O =120 mA G3VM-601BY/EY : I _F =10 mA, I _O =100 mA					
	10	18	G3VM-401BY/EY : I _F = 5 mA, I _O =240 mA G3VM-601BY/EY : I _F =10 mA, I _O =200 mA					
Current leakage when the relay is open		I _{LEAK}	Maximum	1		μA	V _{OFF} =Load voltage ratings	
Capacitance between terminals		C _{OFF}	Typical	40	120	pF	V=0, f=1 MHz	
Capacitance between I/O terminals		C _{I-O}	Typical	0.8		pF	f=1 MHz, V _S =0 V	
Insulation resistance between I/O terminals		R _{I-O}	Minimum	1000		MΩ	V _{I-O} =500 VDC, R _{oH} ≤60%	
			Typical	10 ⁸				
Turn-ON time		t _{ON}	Typical	0.3	0.2	ms	G3VM-401BY/EY : I _F =5mA, R _L =200Ω, V _{DD} =20V * G3VM-601BY/EY : I _F =10mA, R _L =200Ω, V _{DD} =20V *	
			Maximum	1.0	1.5			
Turn-OFF time		t _{OFF}	Typical	0.1	0.2			
			Maximum	1.0				

* Turn-ON and Turn-OFF Times



■Recommended Operating Conditions

For usage with high reliability, Recommended Operation Conditions is a measure that takes into account the derating of Absolute Maximum Ratings and Electrical Characteristics.

Each item on this list is an independent condition, so it is not simultaneously satisfy several conditions.

Item	Symbol		G3VM-401BY G3VM-401EY	G3VM-601BY G3VM-601EY	Unit
Load voltage (AC peak/DC)	V _{DD}	Maximum	320	480	V
Operating LED forward current	I _F	Minimum	5	7.5	mA
		Typical	7.5	15	
		Maximum	25		
Continuous load current (AC peak/DC)	I _O	Maximum	120	100	
Ambient operating temperature	T _a	Minimum	-20		°C
		Maximum	65		

■Spacing and Insulation

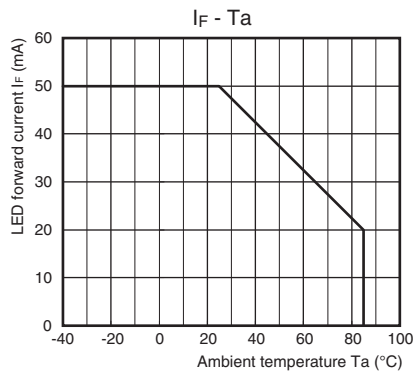
Item	Minimum	Unit
Creepage distances	7.0	mm
Clearance distances	7.0	
Internal isolation thickness	0.4	

DIP

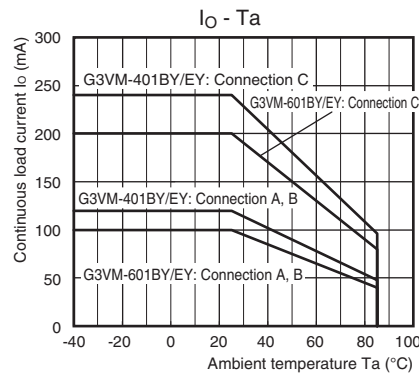
G3VM-□BY/□EY

Engineering Data

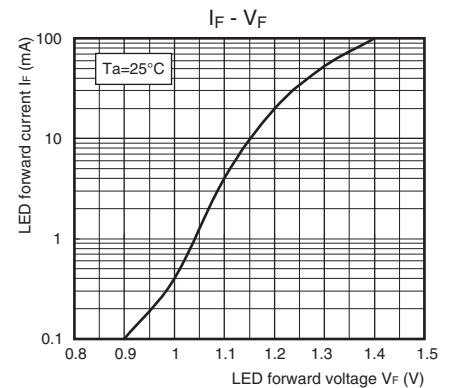
● LED forward current vs. Ambient temperature



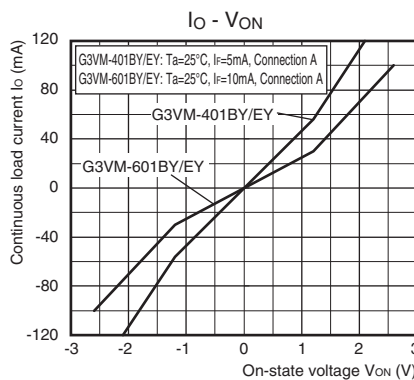
● Continuous load current vs. Ambient temperature



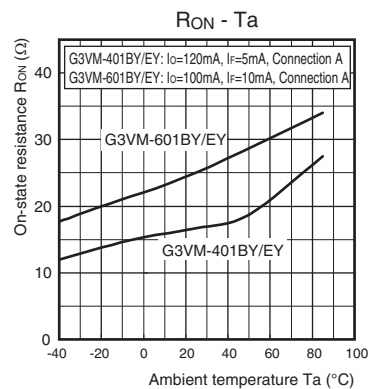
● LED forward current vs. LED forward voltage



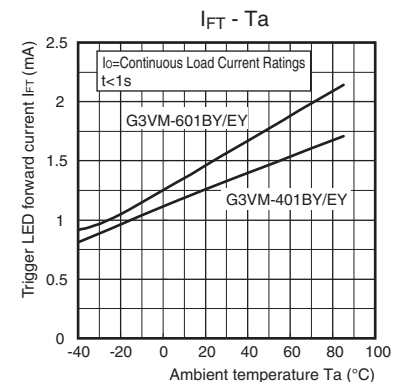
● Continuous load current vs. On-state voltage



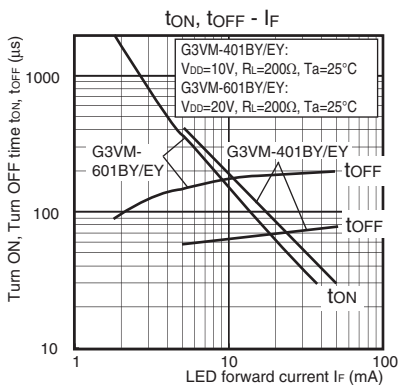
● On-state resistance vs. Ambient temperature



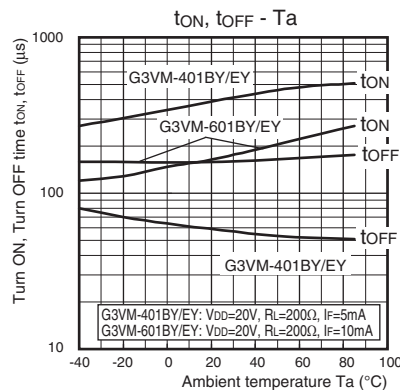
● Trigger LED forward current vs. Ambient temperature



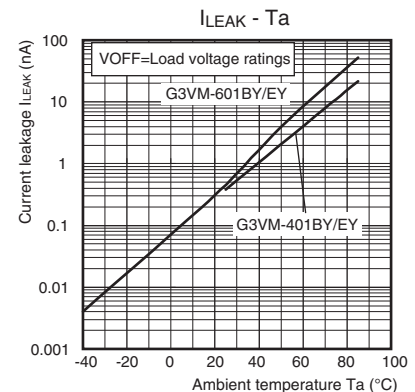
● Turn ON, Turn OFF time vs. LED forward current



● Turn ON, Turn OFF time vs. Ambient temperature



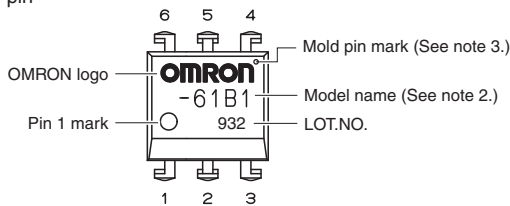
● Current leakage vs. Ambient temperature



■Appearance / Terminal Arrangement / Internal Connections

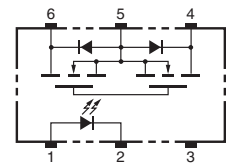
●Appearance

DIP (Dual Inline Package)
DIP 6-pin

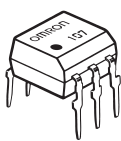


Note: 1. The actual product is marked differently from the image shown here.
Note: 2. "G3VM" does not appear in the model number on the Relay.
Note: 3. The indentation in the corner diagonally opposite from the pin 1 mark is from a pin on the mold.

●Terminal Arrangement/Internal Connections
(Top View)

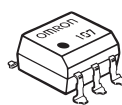
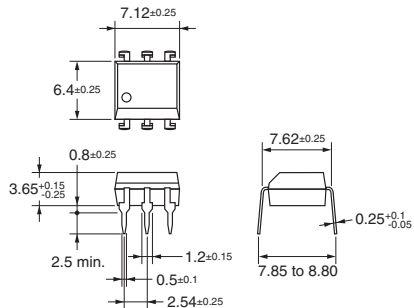


■Dimensions (Unit: mm)



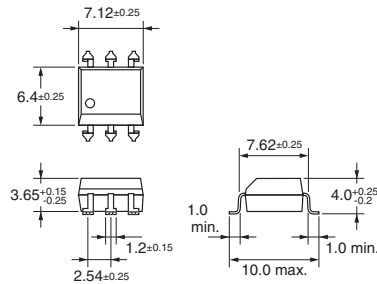
PCB Terminals

Weight: 0.4 g

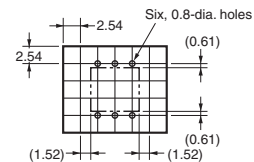


Surface-mounting Terminals

Weight: 0.4 g

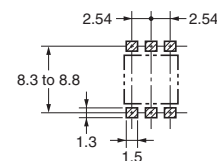


PCB Dimensions (BOTTOM VIEW)



Actual Mounting Pad Dimensions

(Recommended Value, Top View)



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

■Approved Standards

UL recognized

Approved Standards	Contact form	File No.
UL (recognized)	1a (SPST-NO)	E80555

■Safety Precautions

• Refer to the *Common Precautions for All MOS FET Relays* for precautions that apply to all MOS FET Relays.

DIP

G3VM-□BY/□EY

Please check each region's Terms & Conditions by region website.

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Electronic and Mechanical Components Company

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