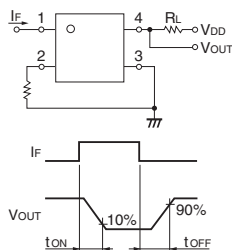


■Electrical Characteristics (Ta = 25°C)

Item		Symbol	G3VM-81G1		Unit	Measurement conditions
Input	LED forward voltage	V _F	Minimum	1.0	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	15	pF	V=0, f=1 MHz
	Trigger LED forward current	I _{FT}	Typical	1	mA	I _O =350 mA
			Maximum	4		
Release LED forward current	I _{FC}	Minimum	0.2	mA	I _{OFF} =10 μA	
Output	Maximum resistance with output ON	R _{ON}	Typical	1	Ω	I _F =5 mA, I _O =350 mA
			Maximum	1.2		
	Current leakage when the relay is open	I _{LEAK}	Typical	0.2	nA	V _{OFF} =30 V, T _a =50°C
			Maximum	1		
	Capacitance between terminals	C _{OFF}	Typical	30	pF	V=0, f=100 MHz
			Maximum	40		
	Capacitance between I/O terminals	C _{I-O}	Typical	0.8	pF	f=1 MHz, V _S =0V
	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	ms	I _F =5 mA, R _L =200 Ω, V _{DD} =20 V *	
		Maximum	0.5			
Turn-OFF time	t _{OFF}	Typical	0.3			
		Maximum	0.5			

* 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.

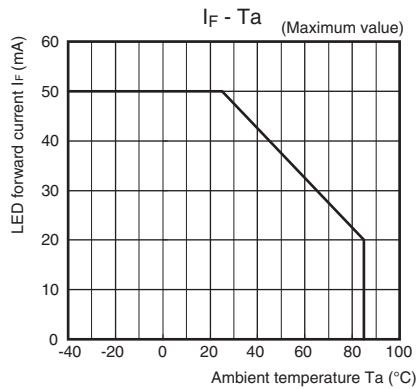
Item	Symbol		G3VM-81G1	Unit
Load voltage (AC peak/DC)	VDD	Maximum	64	V
Operating LED forward current	IF	Minimum	5	mA
		Maximum	30	
Continuous load current (AC peak/DC)	Io	Maximum	350	
Ambient operating temperature	Ta	Minimum	-20	°C
		Maximum	60	

■Spacing and Insulation

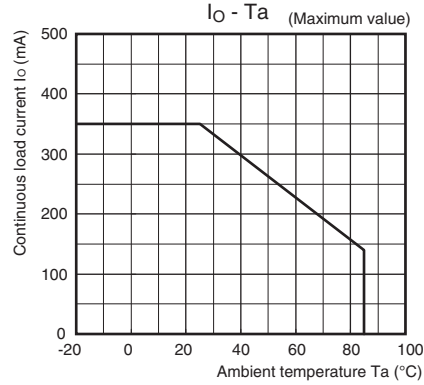
Item	Minimum	Unit
Creepage distances	4.0	mm
Clearance distances	4.0	
Internal isolation thickness	0.1	

Engineering Data

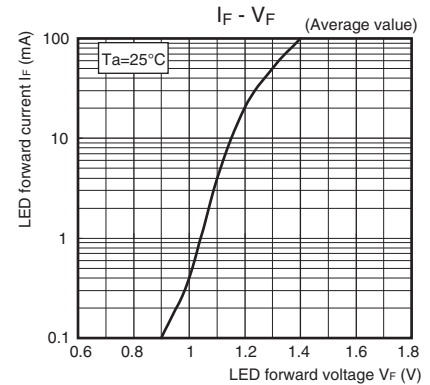
● LED forward current vs. Ambient temperature



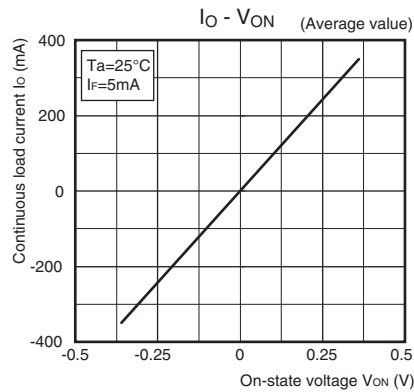
● Continuous load current vs. Ambient temperature



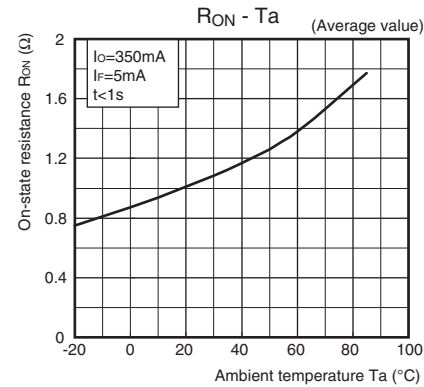
● LED forward current vs. LED forward voltage



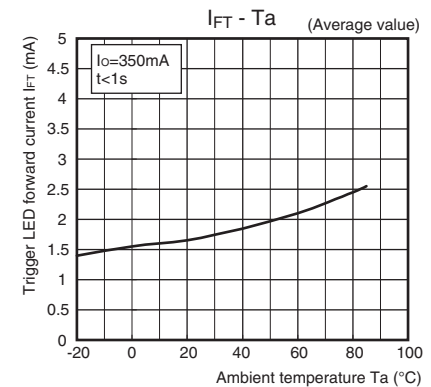
● Continuous load current vs. On-state voltage



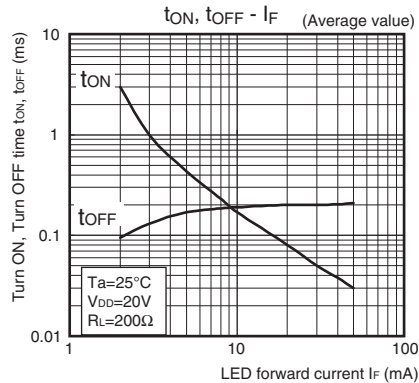
● On-state resistance vs. Ambient temperature



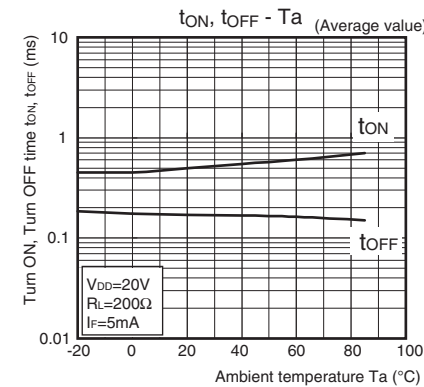
● Trigger LED forward current vs. Ambient temperature



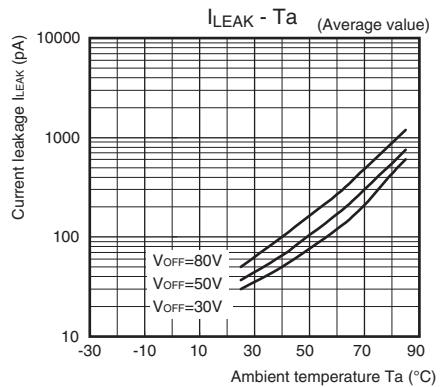
● Turn ON, Turn OFF time vs. LED forward current



● Turn ON, Turn OFF time vs. Ambient temperature



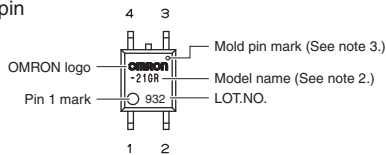
● Current leakage vs. Ambient temperature



■Appearance / Terminal Arrangement / Internal Connections

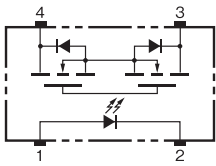
●Appearance

SOP (Small Outline Package)
SOP 4-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.

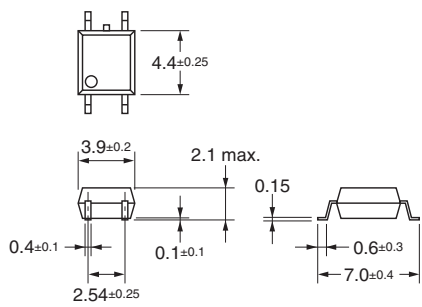
●Terminal Arrangement/Internal Connections
(Top View)



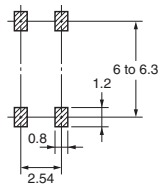
■Dimensions (Unit: mm)



Surface-mounting Terminals
Weight: 0.1 g



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.

SOP

G3VM-81G□

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