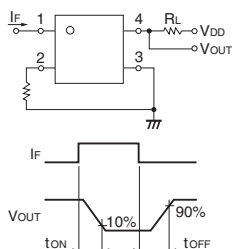


■Electrical Characteristics (Ta = 25°C)

Item		Symbol	G3VM-201G		G3VM-201G1	G3VM-201G2	G3VM-S5	Unit	Measurement conditions
Input	LED forward voltage	V _F	Minimum	1.0		1.1	1.0	V	I _F =10 mA
			Typical	1.15		1.27	1.15		
			Maximum	1.3		1.4	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
	Trigger LED forward current	I _{FT}	Typical	1	0.4	—	1	mA	G3VM-201G : I _o =50 mA G3VM-201G1/201G2/S5 : I _o =200 mA
			Maximum	3	1	0.2	3		
	Release LED forward current	I _{FC}	Minimum	0.1		—	0.1	mA	I _{oFF} =100 μA
Typical			—		0.001	—			
Output	Maximum resistance with output ON	R _{ON}	Typical	40	5		Ω	G3VM-201G/S5 : I _F =5 mA, I _o =Continuous load current ratings G3VM-201G1 : I _F =2 mA, I _o =200 mA G3VM-201G2 : I _F =0.5 mA, I _o =200 mA, t < 1s	
			Maximum	50	8				
	Current leakage when the relay is open	I _{LEAK}	Typical	—	1		—	nA	G3VM-201G : V _{oFF} =160 V G3VM-201G1/201G2/S5 : V _{oFF} =200 V
			Maximum	1	1,000				
	Capacitance between terminals	C _{OFF}	Typical	15	90		100	pF	G3VM-201G : V=0, f=1 MHz, t < 10s G3VM-201G1/201G2/S5 : V=0, f=1 MHz
			Maximum	20	—				
	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, RoH≤60%
Typical			10 ⁸						
Turn-ON time	t _{ON}	Typical	—	3	3.5	0.6	ms	G3VM-201G/S5 : I _F =5 mA, R _L =200 Ω, V _{DD} =20 V * G3VM-201G1 : I _F =2 mA, R _L =200 Ω, V _{DD} =20 V * G3VM-201G2 : I _F =0.5 mA, R _L =200 Ω, V _{DD} =20 V *	
		Maximum	0.5	8	10	1.5			
Turn-OFF time	t _{OFF}	Typical	—	0.6	1	0.1			
		Maximum	0.2	3	5	1			

* 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.

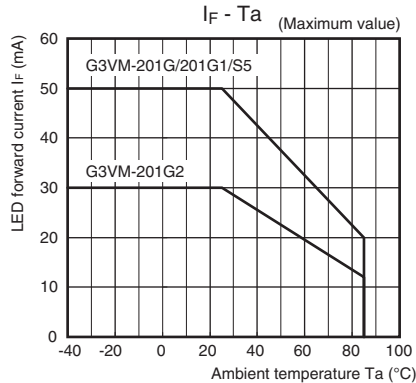
Item	Symbol		G3VM-201G	G3VM-201G1	G3VM-201G2	G3VM-S5	Unit
Load voltage (AC peak/DC)	V _{DD}	Maximum	160			200	V
Operating LED forward current	I _F	Minimum	5	—		5	mA
		Typical	7.5	2	0.5	7.5	
		Maximum	15	25			
Continuous load current (AC peak/DC)	I _o	Maximum	40	160		130	°C
Ambient operating temperature	T _a	Minimum	-20				
		Maximum	65				

■Spacing and Insulation

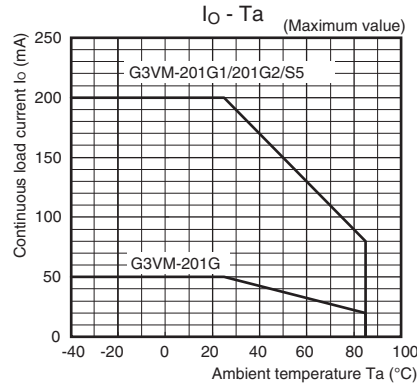
Item	Minimum	Unit
Creepage distances	4.0	mm
Clearance distances	4.0	
Internal isolation thickness	0.1	

Engineering Data

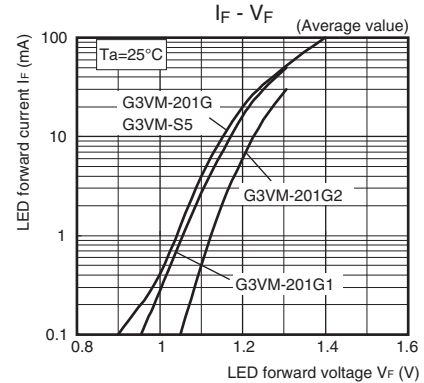
LED forward current vs. Ambient temperature



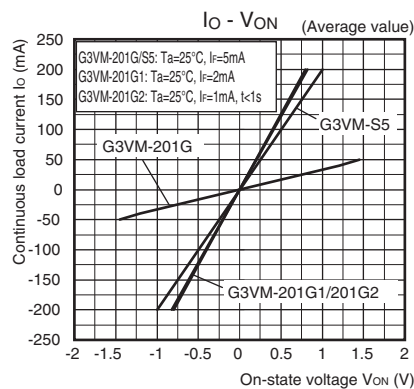
Continuous load current vs. Ambient temperature



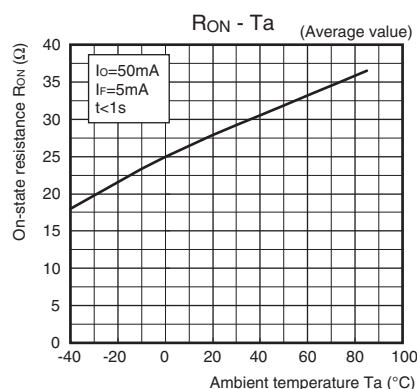
LED forward current vs. LED forward voltage



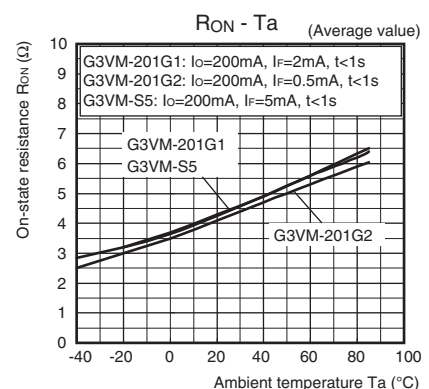
Continuous load current vs. On-state voltage



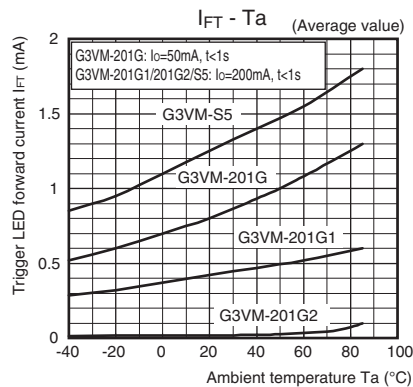
On-state resistance vs. Ambient temperature



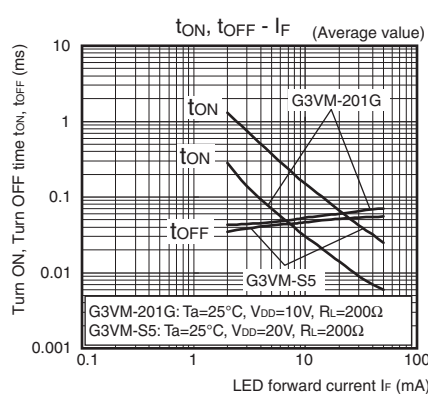
G3VM-201G1/201G2/S5



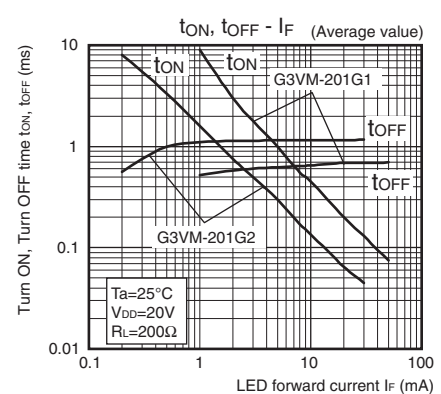
Trigger LED forward current vs. Ambient temperature



Turn ON, Turn OFF time vs. LED forward current

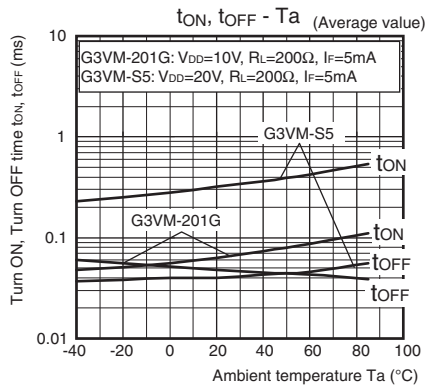


G3VM-201G1/201G2

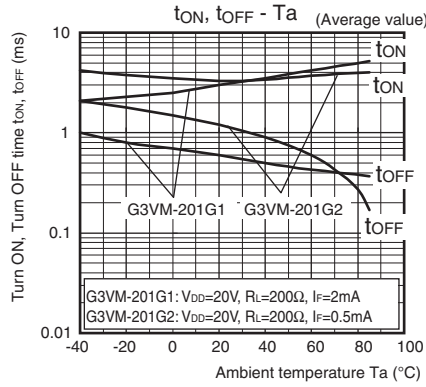


Engineering Data

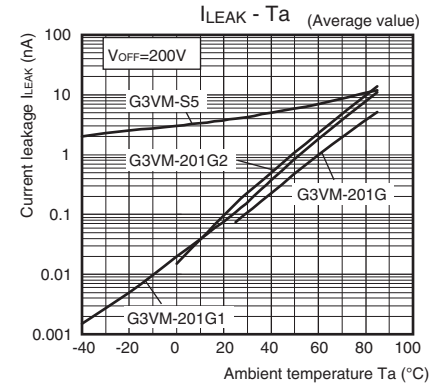
Turn ON, Turn OFF time vs. Ambient temperature
G3VM-201G/S5



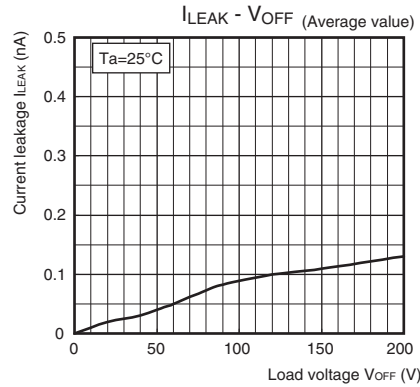
G3VM-201G1/201G2



Current leakage vs. Ambient temperature



Current leakage vs. Load voltage
G3VM-201G2



SOP

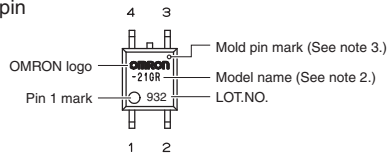
G3VM-201G□/S5

■Appearance / Terminal Arrangement / Internal Connections

●Appearance

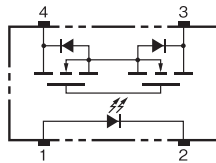
SOP (Small Outline Package)

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.

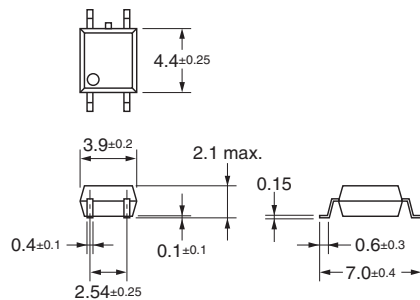
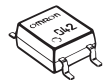
●Terminal Arrangement/Internal Connections
(Top View)



■Dimensions (Unit: mm)

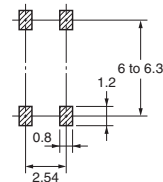
Surface-mounting Terminals

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.

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

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In the interest of product improvement, specifications are subject to change without notice.

Cat. No. K300-E1-02
0220(0318)(O)