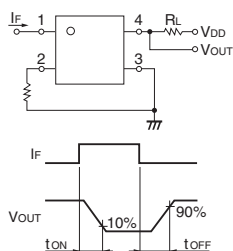


■Electrical Characteristics (Ta = 25°C)

Item		Symbol		G3VM-61LR	G3VM-81LR	G3VM-101LR	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	2		1	mA	G3VM-61LR : I _o =100 mA G3VM-81LR : I _o =120 mA G3VM-101LR : I _o =80 mA
Maximum			5					
Output	Release LED forward current	I _{FC}	Minimum	0.2	0.1	0.2	mA	G3VM-61LR/81LR : I _{OFF} =10 μA G3VM-101LR : I _{OFF} =1 μA
	Maximum resistance with output ON	R _{ON}	Typical	1	7.5	8	Ω	G3VM-61LR : I _F =5 mA, I _o =Continuous load current ratings G3VM-81LR/101LR : I _F =10 mA, I _o =Continuous load current ratings, t=10 ms
			Maximum	1.5	12	14		
	Current leakage when the relay is open	I _{LEAK}	Maximum	1,000	0.2		nA	G3VM-61LR : V _{OFF} =60 V G3VM-81LR : V _{OFF} =80 V, T _a =60°C G3VM-101LR : V _{OFF} =80 V
	Capacitance between terminals	C _{OFF}	Typical	20	5	6	pF	V=0, f=100 MHz, t<1 s
			Maximum	30	7	8		
Capacitance between I/O terminals	C _{I-O}	Typical	0.3	0.8	0.6	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	0.1		ms	G3VM-81LR : I _F =10 mA, R _L =200 Ω, V _{DD} =20 V * G3VM-61LR/101LR : I _F =5 mA, R _L =200 Ω, V _{DD} =20 V *	
		Maximum	1	0.25	0.3			
Turn-OFF time	t _{OFF}	Typical	0.2	0.15	0.1			
		Maximum	1	0.2	0.3			

* 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.

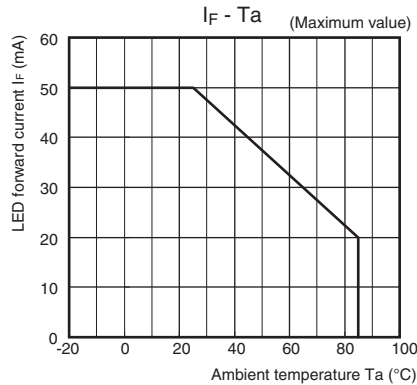
Item	Symbol		G3VM-61LR	G3VM-81LR	G3VM-101LR	Unit
Load voltage (AC peak/DC)	V _{DD}	Maximum	48	64	80	V
Operating LED forward current	I _F	Minimum	10			mA
		Maximum	20	30		
Continuous load current (AC peak/DC)	I _O	Maximum	400	120	80	
Ambient operating temperature	T _a	Minimum	-20			°C
		Maximum	70	60		

■Spacing and Insulation

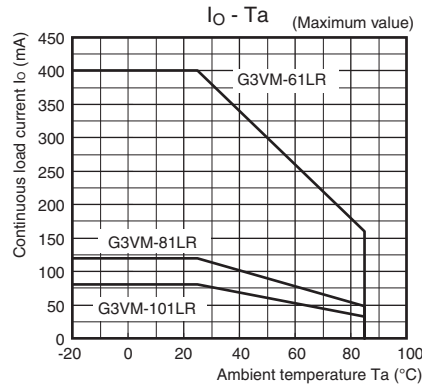
Item	Minimum	Unit
Creepage distances	2.5	mm
Clearance distances	2.5	
Internal isolation thickness	0.1	

Engineering Data

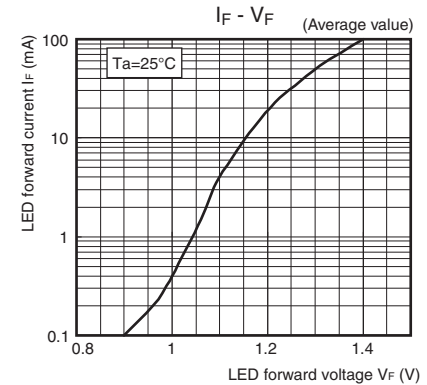
LED forward current vs. Ambient temperature



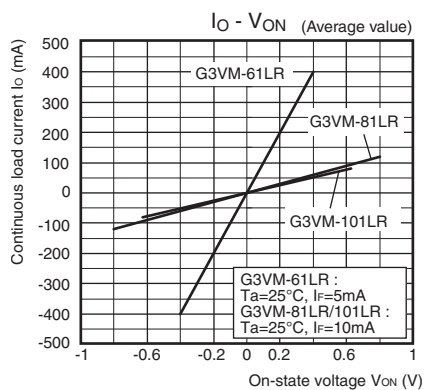
Continuous load current vs. Ambient temperature



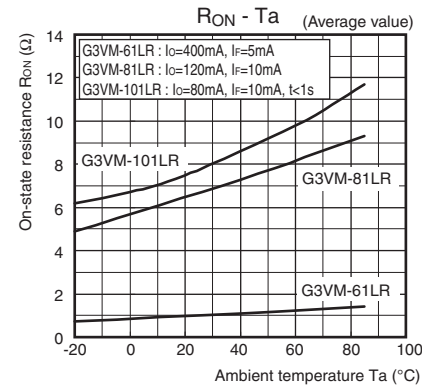
LED forward current vs. LED forward voltage



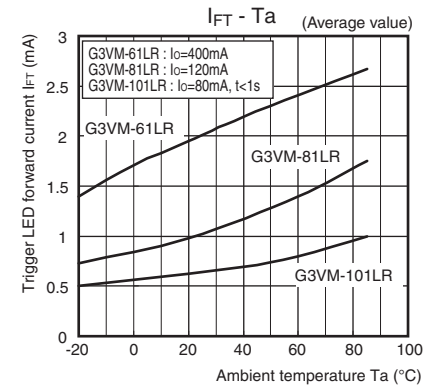
Continuous load current vs. On-state voltage



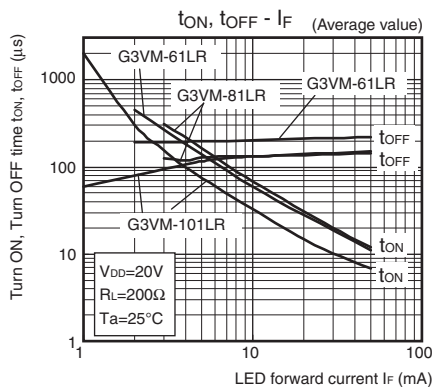
On-state resistance vs. Ambient temperature



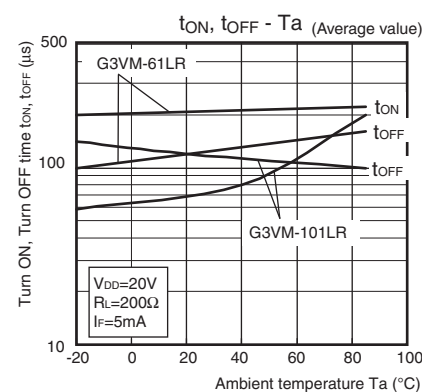
Trigger LED forward current vs. Ambient temperature



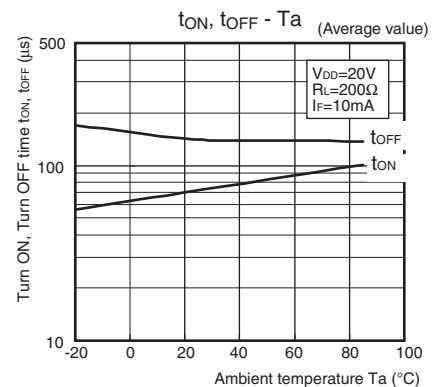
Turn ON, Turn OFF time vs. LED forward current



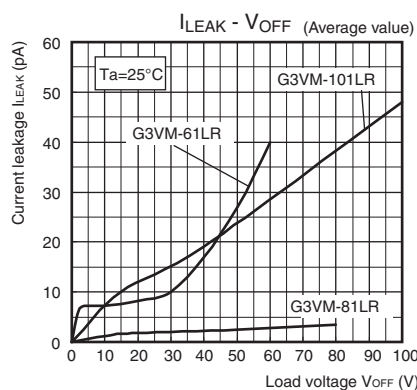
Turn ON, Turn OFF time vs. Ambient temperature



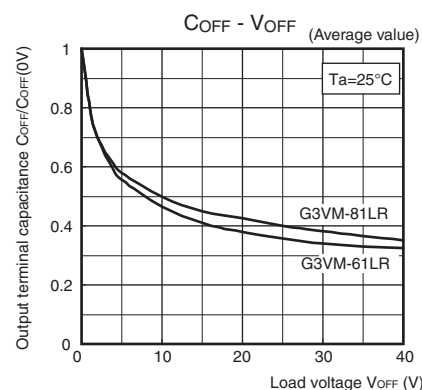
G3VM-81LR



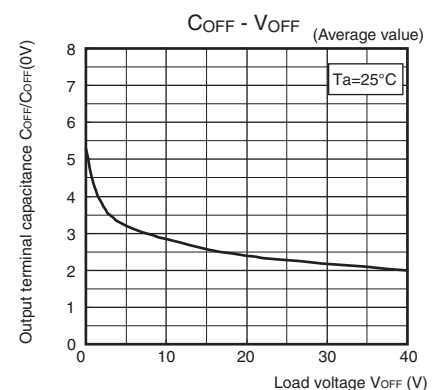
Current leakage vs. Ambient temperature



Output terminal capacitance vs. Load voltage



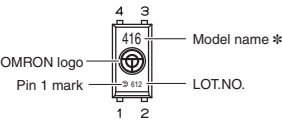
G3VM-101LR



■Appearance / Terminal Arrangement / Internal Connections

●Appearance

SSOP (Shrink Small Outline Package)
SSOP 4-pin

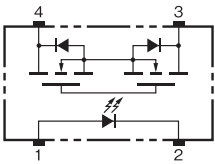


Note: 1. The actual product is marked differently from the image shown here.
Note: 2. "G3VM" does not appear in the model number on the Relay.

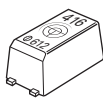
* Actual model name marking
for each model

Model	Marking
G3VM-61LR	610
G3VM-81LR	810
G3VM-101LR	101

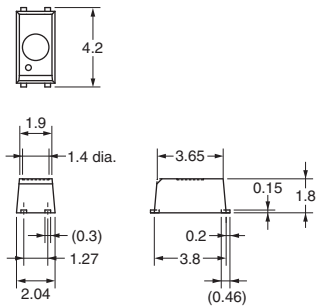
●Terminal Arrangement/
Internal Connections
(Top View)



■Dimensions (Unit: mm)

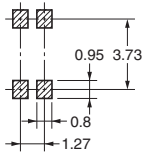


Surface-mounting Terminals
Weight: 0.03 g



Unless otherwise specified, the dimensional
tolerance is ± 0.1 mm.

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.

SSOP

G3VM-61LR/81LR/101LR

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

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