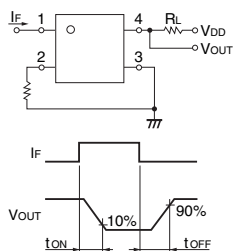


■Electrical Characteristics (Ta = 25°C)

Item		Symbol	G3VM-61PR1	G3VM-61PR	G3VM-71PR	G3VM-81PR	G3VM-101PR	Unit	Measurement conditions	
Input	LED forward voltage	V _F	Minimum	1.0				V	I _F =10mA	
			Typical	1.15						
			Maximum	1.3						
	Reverse current	I _R	Maximum	10				μA	V _R =5V	
	Capacity between terminals	C _T	Typical	15				pF	V=0, f=1MHz	
	Trigger LED forward current	I _{FT}	Typical	1.0	0.5		0.6	0.5	mA	I _o =100mA
			Maximum	3						
Release LED forward current	I _{FC}	Minimum	0.1	0.2	0.1			mA	I _{OFF} =10μA	
Output	Maximum resistance with output ON	R _{ON}	Typical	10	1		7	8	Ω	G3VM-61PR : I _F =5mA, I _o =400mA Others : I _F =5mA, I _o =Continuous load current ratings, t<1s
			Maximum	15	1.5		12	14		
	Current leakage when the relay is open	I _{LEAK}	Maximum	1			0.02	0.2	nA	V _{OFF} =Load voltage ratings
	Capacity between terminals	C _{OFF}	Typical	0.7	20	30	5	6	pF	G3VM-61PR : V=0, f=1MHz, t<1s Others : V=0, f=100MHz, t<1s
			Maximum	1.3	—		7	8		
	Capacity between I/O terminals	C _{I-O}	Typical	0.4	0.3	0.4			pF	f=1MHz, V _S =0V
	Insulation resistance between I/O terminals	R _{I-O}	Maximum	1000					MΩ	V _{I-O} =500VDC, RoH≤60%
Typical			10 ⁸							
Turn-ON time	t _{ON}	Typical	0.04	0.3	0.4	0.14	0.12	ms	I _F =5mA, R _L =200Ω, V _{DD} =20V *	
Maximum		0.2	0.5	2	0.5	0.3				
Turn-OFF time	t _{OFF}	Typical	0.12	0.3	0.2	0.16	0.18			
		Maximum	0.2	0.5	1	0.2	0.3			

* Turn-ON and Turn-OFF Times



■Recommended Operating Conditions

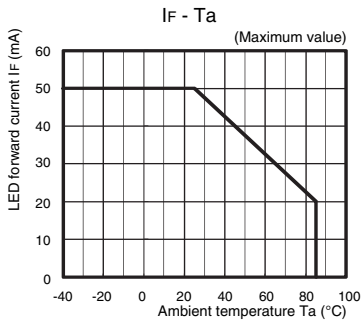
For usage with high reliability, Recommended Operation Conditions is a measure that takes into account the derating of Absolute Maximum Ratings and Electrical Characteristics.

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

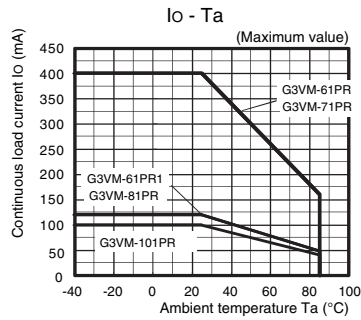
Item	Symbol		G3VM-61PR1	G3VM-61PR	G3VM-71PR	G3VM-81PR	G3VM-101PR	Unit
Load voltage (AC peak/DC)	V _{DD}	Maximum	48		60	64	80	V
Operating LED forward current	I _F	Minimum	5					mA
		Typical	7.5					
		Maximum	20					
Continuous load current (AC peak/DC)	I _O	Maximum	120	400		120	100	
Ambient operating temperature	T _a	Minimum	−20					°C
		Maximum	65					

Engineering Data

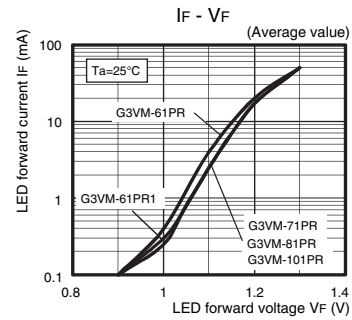
LED forward current vs. Ambient temperature



Continuous load current vs. Ambient temperature

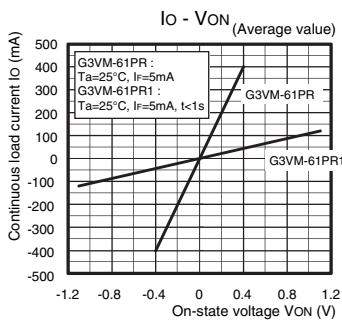


LED forward current vs. LED forward voltage

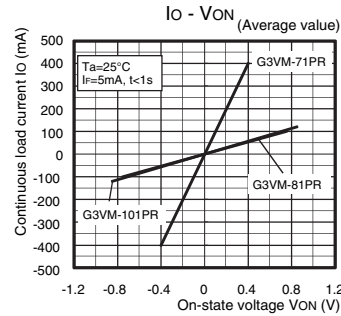


Continuous load current vs. On-state voltage

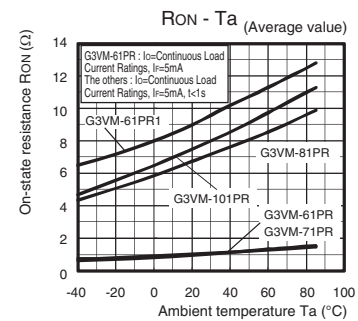
G3VM-61PR/61PR1



G3VM-71PR/81PR/101PR

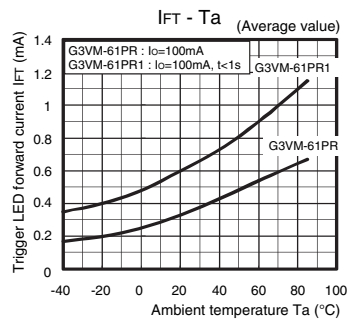


On-state resistance vs. Ambient temperature

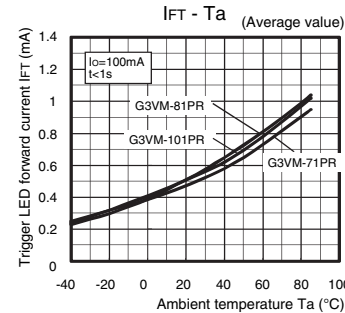


Trigger LED forward current vs. Ambient temperature

G3VM-61PR/61PR1

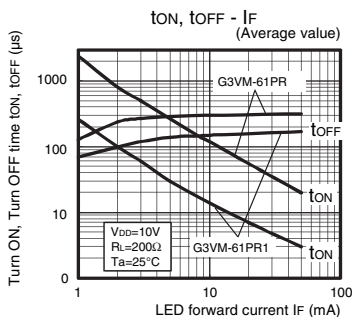


G3VM-71PR/81PR/101PR

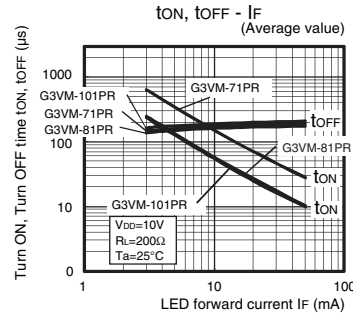


Turn ON, Turn OFF time vs. LED forward current

G3VM-61PR/61PR1



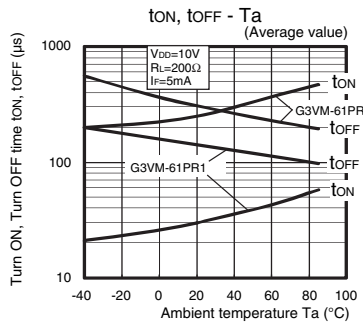
G3VM-71PR/81PR/101PR



Engineering Data

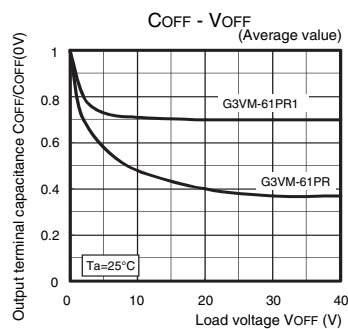
Turn ON, Turn OFF time vs. Ambient temperature

G3VM-61PR/61PR1

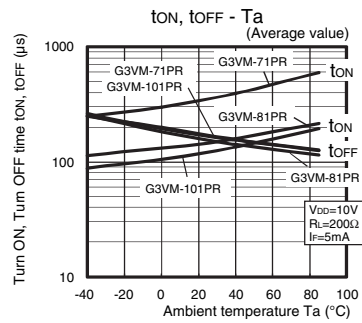


Output terminal capacitance vs. Load voltage

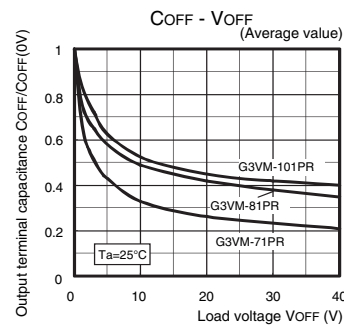
G3VM-61PR/61PR1



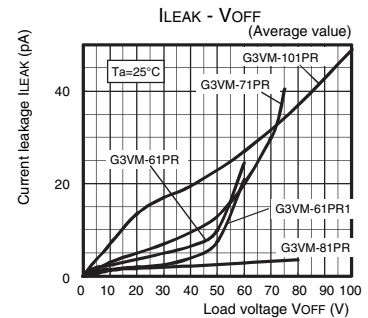
G3VM-71PR/81PR/101PR



G3VM-71PR/81PR/101PR

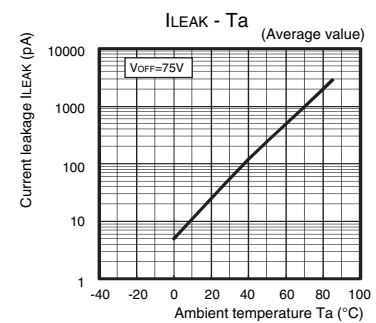


Current leakage vs. Load voltage



Current leakage vs. Ambient temperature

G3VM-71PR

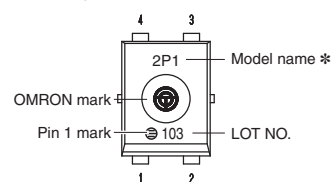


■Appearance / Terminal Arrangement / Internal Connections

■Appearance

USOP (Ultra Small Outline Package)

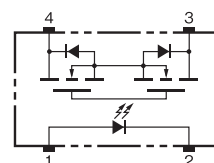
USOP4 pin



* Actual model name marking for each model

Model	Marking
G3VM-61PR1	6P1
G3VM-61PR	6P0
G3VM-71PR	7P0
G3VM-81PR	8P0
G3VM-101PR	AP0

■Terminal Arrangement/Internal Connections (Top View)

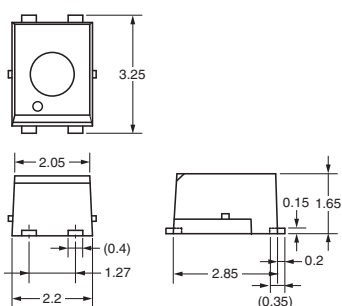
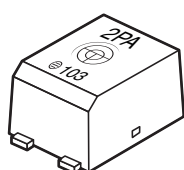


Note: The actual product is marked differently from the image shown here.

■Dimensions (Unit: mm)

Surface-mounting Terminals

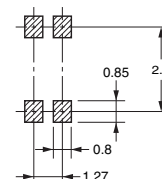
Weight: 0.03g



Unless otherwise specified, the dimensional tolerance is ± 0.2 mm.

Actual Mounting Pad Dimensions

(Recommended Value, Top View)



Unless otherwise specified, the dimensional tolerance is ± 0.2 mm.

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 "Common Precautions" for all G3VM models.

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

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