

■ Absolute Maximum Ratings (Ta = 25°C)

Item		Symbol	Rating	Unit	Measurement Conditions
Input	LED forward current	I_F	50	mA	
	Repetitive peak LED forward current	I_{FP}	1	A	100 μs pulses, 100 pps
	LED forward current reduction rate	$\Delta I_F/^{\circ}\text{C}$	-0.5	mA/ $^{\circ}\text{C}$	Ta ≥ 25°C
	LED reverse voltage	V_R	5	V	
	Connection temperature	T_j	125	°C	
Output	Output dielectric strength	V_{OFF}	350	V	
	Continuous load current	I_O	120 (100)	mA	
	ON current reduction rate	$\Delta I_{ON}/^{\circ}\text{C}$	-1.2 (-1)	mA/ $^{\circ}\text{C}$	Ta ≥ 25°C
	Connection temperature	T_j	125	°C	
Dielectric strength between input and output (See note 1.)		V_{I-O}	2,500	Vrms	AC for 1 min
Operating temperature		T_a	-40 to +85	°C	With no icing or condensation
Storage temperature		T_{stg}	-55 to +125	°C	With no icing or condensation
Soldering temperature (10 s)		---	260	°C	10 s

Values in parentheses are for the G3VM-355C/F.

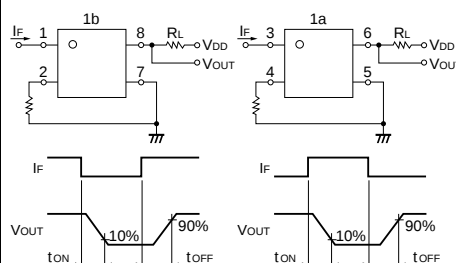
■ Electrical Characteristics (Ta = 25°C)

Item		Symbol	Mini- mum	Typical	Maxi- mum	Unit	Measurement conditions
Input	LED forward voltage	V _F	1.0	1.15	1.3	V	I _F = 10 mA
	Reverse current	I _R	---	---	10	μA	V _R = 5 V
	Capacity between terminals	C _T	---	30	---	pF	V = 0, f = 1 MHz
	Trigger LED forward current	I _{FT}	---	1	3	mA	SPST-NO: I _O = 120 mA (100 mA) SPST-NC: I _{OFF} = 10 μA
Out- put	Maximum resistance with output ON	R _{ON}	---	15 (40)	25 (50)	Ω	SPST-NO: I _F = 5 mA, I _O = 120 mA (100 mA) SPST-NC: I _F = 0 mA, I _O = 120 mA 100 mA
	Current leakage when the relay is open	I _{LEAK}	---	---	1.0	μA	V _{OFF} = 350 V
Capacity between I/O terminals		C _{I-O}	---	0.8	---	pF	f = 1 MHz, V _s = 0 V
Insulation resistance		R _{I-O}	1,000	---	---	MΩ	V _{I-O} = 500 VDC, ROH ≤ 60%
Turn-ON time	SPST-NO	t _{ON}	---	(0.3)	1.0	ms	I _F = 5 mA, R _L = 200 Ω, V _{DD} = 20 V (See note 2.)
	SPST-NC		---	(0.25)	1.0	ms	
Turn-OFF time	SPST-NO	t _{OFF}	---	(0.15)	1.0	ms	
	SPST-NC		---	(0.5)	3.0 (1)	ms	

Values in parentheses are for the G3VM-355C/F.

Note: 1. The dielectric strength between the input and output was checked by applying voltage between all pins as a group on the LED side and all pins as a group on the light-receiving side.

Note: 2. Turn-ON and Turn-OFF Times



■ Recommended Operating Conditions

Use the G3VM under the following conditions so that the Relay will operate properly.

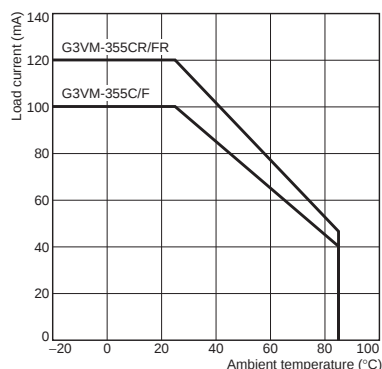
Item	Symbol	Minimum	Typical	Maximum	Unit
Output dielectric strength	V_{DD}	---	---	280	V
Operating LED forward current	I_F	5	---	25	mA
Continuous load current	I_O	---	---	120 (100)	mA
Operating temperature	T_a	-20	---	65	°C

Values in parentheses are for the G3VM-355C/F.

■ Engineering Data

Load Current vs. Ambient Temperature

G3VM-355C(F)
G3VM-355CR/FR



■ Safety Precautions

Refer to "Common Precautions" for all G3VM models.