

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	Δ I _F /°C	-0.5	mA/°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 (90)	mA	
	ON current reduction rate	Δ I _{ON} /°C	-1.2 (-0.9)	mA/°C	Ta ≥ 25°C
	Connection temperature	T _j	125	°C	
Dielectric strength between input and output (See note 1.)		V _{I-O}	1,500	V _{rms}	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-355J.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Minimum	Typical	Maximum	Unit	Measurement conditions
Input	LED forward voltage	V _F	1.0	1.15	1.3	V
	Reverse current	I _R	---	---	10	μA
	Capacity between terminals	C _T	---	30	---	pF
	Trigger LED forward current	I _{FT}	---	1	3	mA
Output	Maximum resistance with output ON	R _{ON}	---	15 (40)	25 (50)	Ω
						SPST-NO: I _F = 5 mA, I _O = 90 mA
						SPST-NC: I _F = 0 mA, I _O = 90 mA
	Current leakage when the relay is open	I _{LEAK}	---	---	1.0	μA
Capacity between I/O terminals		C _{I-O}	---	0.8	---	pF
Insulation resistance		R _{I-O}	1,000	---	---	MΩ
Turn-ON time	SPST-NO	t _{ON}	---	(0.3)	1.0	ms
	SPST-NC	t _{ON}	---	(0.25)	1.0	ms
Turn-OFF time	SPST-NO	t _{OFF}	---	(0.15)	1.0	ms
	SPST-NC	t _{OFF}	---	(0.5)	3.0 (1)	ms

Values in parentheses are for the G3VM-355J.

Recommended Operating Conditions

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

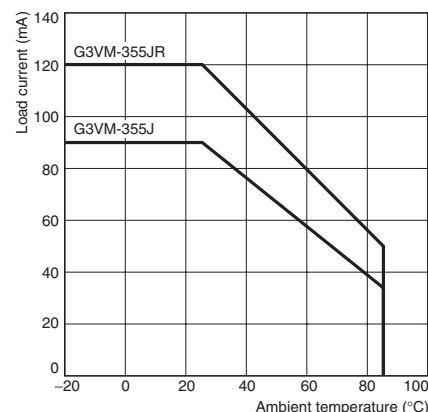
Item	Symbol	Minimum	Typical	Maximum	Unit
Output dielectric strength	V _{DD}	---	---	280	V
Operating LED forward current	I _F	5	---	25	mA
Continuous load current	I _O	---	---	120 (90)	mA
Operating temperature	T _a	-20	---	65	°C

Values in parentheses are for the G3VM-355J.

Engineering Data

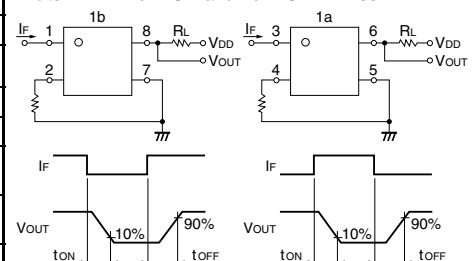
Load Current vs. Ambient Temperature

G3VM-355J/JR



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



Safety Precautions

Refer to "Common Precautions" for all G3VM models.