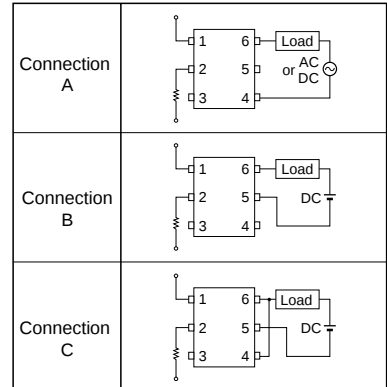


Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Rating	Unit	Measurement Conditions
Input	LED forward current	I_F	50	mA
	Repetitive peak LED forward current	I_{FP}	1	A
	LED forward current reduction rate	$\Delta I_F/^\circ\text{C}$	-0.5	mA/°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	Connection A	120	mA
		Connection B	120	
		Connection C	240	
	ON current reduction rate	Connection A	-1.2	mA/°C
		Connection B	-1.2	
		Connection C	-2.4	
	Connection temperature	T_J	125	°C
Dielectric strength between input and output (See note 1.)		V_{I-O}	2,500	Vrms
Operating temperature		T_a	-40 to +85	°C
Storage temperature		T_{stg}	-55 to +125	°C
Soldering temperature (10 s)		---	260	°C
				10 s

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.

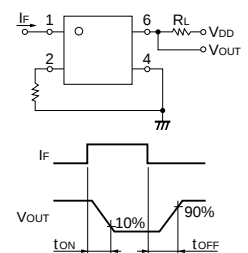
Connection Diagram



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	I _O = 120 mA
Output	Maximum resistance with output ON	Connection A	R _{ON}	---	25	35	Ω	I _F = 5 mA, I _O = 120 mA, t < 1 s
				---	35	50	Ω	I _F = 5 mA, I _O = 120 mA
		Connection B		---	28	40	Ω	I _F = 5 mA, I _O = 120 mA
		Connection C		---	14	20	Ω	I _F = 5 mA, I _O = 240 mA
		Current leakage when the relay is open		I _{LEAK}	---	---	1.0	μA
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			t _{ON}	---	0.3	1.0	ms	I _F = 5 mA, R _L = 200 Ω, V _{DD} = 20 V (See note 2.)
Turn-OFF time			t _{OFF}	---	0.1	1.0	ms	

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



Recommended Operating Conditions

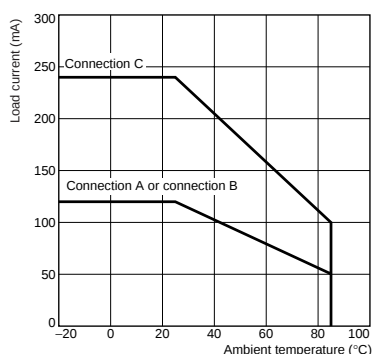
Use the G3VM under the following conditions so that the Relay will operate properly.

Item	Symbol	Minimum	Typical	Maximum	Unit
Output dielectric strength	V_{DD}	---	---	280	V
Operating LED forward current	I_F	5	10	25	mA
Continuous load current	I_O	---	---	100	mA
Operating temperature	T_a	-20	---	65	°C

Engineering Data

Load Current vs. Ambient Temperature

G3VM-351B(E)



Safety Precautions

Refer to page 6 for precautions common to all G3VM models.