

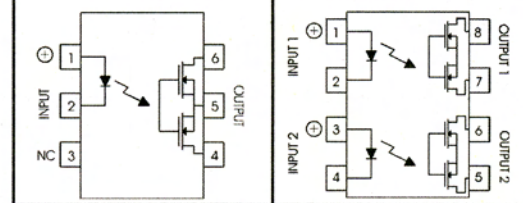
G2 Series/ **FORM B** Solid State Relays

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RELAYS

Model Number					G2-1B01	G2-1B02	G2-DB01	G2-DB02
Parameters	Sym.	Test Conditions	Units		1 Form B	1 Form B	Dual Form B	Dual Form B
Input Characteristics								
LED Forward Current - Turn on	I_{Fon}	$I_L = 100mA, t = 10mS$	mADC	Max	5.0	5.0	5.0	5.0
				Typ	3.0	3.0	3.0	3.0
LED Forward Current - Turn off	I_{Foff}	$I_L = 0.2mA, V_L = (Note 1)$	mADC	Min	0.1	0.1	0.1	0.1
				Typ	1.8	1.8	1.8	1.8
Recommended Forward Current	I_F		mADC	Min	10	10	10	10
				Max	30	30	30	30
LED Forward Voltage	V_F	$I_F = 20mA$	VDC	Min	1.1	1.1	1.1	1.1
				Max	1.4	1.4	1.4	1.4
Maximum Input Ratings								
LED Forward Current	I_F		mADC	Max	50	50	50	50
LED Reverse Voltage Withstand	V_R	$I_R = 10mA$	VDC	Max	10	10	10	10
Output Characteristics								
Switching Voltage	V_L	$I_L = 50mA$	V PEAK	Max	350	250	350	250
Switching Current	I_L	(Note 2)	mA	Max	165	200	170	200
		(Note 3)	mA	Max	330	400	120	140
On Resistance (Note 2)	R_{On}	$I_F = 5mA, I_L = 50mA$	Ω	Max	20	13	20	13
On Resistance (Note 4)	R_{On}	$I_F = 5mA, I_L = 50mA$	Ω	Max	5.0	3.25	n/a	n/a
Off State Resistance	R_{Off}	$I_F = 0mA, V_L = 100V$	G Ω	Min	0.1	0.1	0.1	0.1
				Typ	1.4	1.4	1.4	1.4
Off State Leakage	I_{Off}	$I_F = 0mA, V_L = 100V$	μA	Max	0.07	0.07	0.07	0.07
				Typ	1.0	1.0	1.0	1.0
	I_{Off}	$I_F = 0mA, V_L = Max$	μA	Max	1.0	1.0	1.0	1.0
Turn On Time	T_{On}	$I_F = 5mA, I_L = 50mA$	mS	Max	5.0	5.0	5.0	5.0
Turn Off Time	T_{Off}	$I_F = 5mA, I_L = 50mA$	mS	Max	1.0	1.0	1.0	1.0
Capacitance - Across Output		$I_F = 0mA, V_L = 1V$	pF	Typ	200	170	200	170
		$I_F = 0mA, V_L = 50V$	pF	Typ	20	25	20	25
Thermal Offset Voltage		$I_F = 5mA$	μV	Typ	0.2	0.2	0.2	0.2
General Characteristics								
Dielectric Strength - Input to Output		$t = 60sec.$	V RMS	Min	3750	3750	3750	3750
Capacitance - Input to Output			pF	Typ	0.8	0.8	1.2	1.2
Power Dissipation	P_{Diss}		mW	Max	500	500	600	600

Schematic Top View:
Mold mark on top of relay indicates Pin #1
Package Drawings on Page 61



Notes:

- 1: V_L for LED Forward Current - Turn off is 50 Volts less than "Switching Voltage : Max"
- 2: For G2-1B01 and G2-1B02: Output connected to pins 4 and 6.
For G2-DB01 and G2-DB02: Each channel.
- 3: For G2-1B01 and G2-1B02: Output connected to pin 5(-) and pins 4 & 6(+).
For G2-DB01 and G2-DB02: Both channels switching simultaneously
- 4: For G2-1B01 and G2-1B02: Output connected to pin 5(-) and pins 4 & 6(+).
- 5: Specifications subject to change without notice

Environmental Ratings

Storage Temp: $-40^{\circ}C$ to $+150^{\circ}C$
 Operating Temp: $-40^{\circ}C$ to $+85^{\circ}C$
 Solder Temp: $240^{\circ}C$ max. for 10 seconds
 All electrical parameters specified at $25^{\circ}C$
 Vibration: 20G's to 2000Hz
 Shock: 50G's