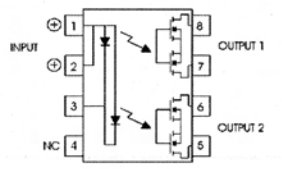
# G2 Series/ 2 FORM A Solid State Relays



| Model Number | | | | | G2-2A03 |
|---|---|---|---|---|---|
| Parameters | Sym. | Test Conditions | Units | | 2 Form A |
| **Input Characteristics** | | | | | |
| LED Forward Current - Turn on | $I_{Fon}$ | $I_L$ = 100mA, t = 10mS | mADC | Max | 10 |
| | | | | Typ | 3.4 |
| LED Forward Current - Turn off | $I_{Foff}$ | $I_L$ = 0.2mA, $V_L$ = (Note 1) | mADC | Min | 0.1 |
| | | | | Typ | 3.0 |
| Recommended Forward Current | $I_F$ | | mADC | Min | 15 |
| | | | | Max | 40 |
| LED Forward Voltage | $V_F$ | $I_F$ = 20mA | VDC | Min | 1.1 |
| | | | | Max | 1.4 |
| **Maximum Input Ratings** | | | | | |
| LED Forward Current | $I_F$ | | mADC | Max | 50 |
| LED Reverse Voltage Withstand | $V_R$ | $I_R$ =10$\mu$A | VDC | Max | 10 |
| **Output Characteristics** | | | | | |
| Switching Voltage | $V_L$ | $I_L$ = 50mA | V PEAK | Max | 15 |
| Switching Current | $I_L$ | Each Channel | mA | Max | 250 |
| | | Both Ch.'s Simultaneously | mA | Max | 150 |
| Current Limit | $I_{Lmt}$ | $I_F$ = 5mA, t = 5mS | mA | Min | n/a |
| | | | | Max | n/a |
| On Resistance | $R_{On}$ | $I_F$ = 10mA, $I_L$ = 50mA | Ω | Max | 8 |
| Off State Resistance | $R_{Off}$ | $I_F$ = 0mA, $V_L$ = 15V | GΩ | Min | 0.5 |
| | | | | Typ | 5000 |
| Off State Leakage | $I_{Off}$ | $I_F$ = 0mA, $V_L$ = 15V | nA | Max | 200 |
| | | | | Typ | 0.5 |
| | $I_{Off}$ | $I_F$ = 0mA, $V_L$ = Max | $\mu$A | Max | 1 |
| Turn On Time | $T_{On}$ | $I_F$ = 10mA, $I_L$ = 50mA | mS | Max | 1.5 |
| Turn Off Time | $T_{Off}$ | $I_F$ = 10mA, $I_L$ = 50mA | mS | Max | 0.5 |
| Capacitance - Across Output | | $I_F$ = 0mA, $V_L$ = 1V | pF | Typ | 40 |
| | | $I_F$ = 0mA, $V_L$ = 50V | pF | Typ | - |
| Thermal Offset Voltage | | $I_F$ = 10mA | $\mu$V | Typ | 0.2 |
| **General Characteristics** | | | | | |
| Dielectric Strength - Input to Output | | t = 60sec. | V RMS | Min | 3750 |
| Capacitance - Input to Output | | | pF | Typ | 1.2 |
| Power Dissipation | $P_{Diss}$ | | mW | Max | 600 |

Schematic Top View:
Mold mark on top of relay indicates Pin #1
Package Drawings on Page 485




**Notes:**
1: $V_L$ for LED Forward Current - Turn off is 50 Volts less than "Switching Voltage : Max"
2: Specifications subject to change without notice

**Environmental Ratings**
Storage Temp: -40°C to +150°C
Operating Temp: -40°C to +85°C
Solder Temp: 240°C max. for 10 seconds
All electrical parameters specified at 25°C
Vibration: 20G's to 2000Hz
Shock: 50G's



Toll Free 1-800-526-5376 • 201-337-1000 • Fax 201-337-1862