

**Reverse Voltage - 50 to 800 Volts      Forward Current - 5.0 Amperes**

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High surge current capability
- ◆ High forward current operation
- ◆ Fast switching for high efficiency
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Uniform molded body
- ◆ High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension



**Case:** Void-free molded plastic body  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.07 ounce, 2.1grams

Ratings at 25°C ambient temperature unless otherwise specified.

|                                                                                                        | SYMBOLS  | GI820        | GI821 | GI822 | GI824 | GI826 | GI828 | UNITS    |
|--------------------------------------------------------------------------------------------------------|----------|--------------|-------|-------|-------|-------|-------|----------|
| Maximum repetitive peak reverse voltage                                                                | VRRM     | 50           | 100   | 200   | 400   | 600   | 800   | Volts    |
| Maximum RMS voltage                                                                                    | VRMS     | 35           | 70    | 140   | 280   | 420   | 560   | Volts    |
| Maximum DC blocking voltage                                                                            | VDC      | 50           | 100   | 200   | 400   | 600   | 800   | Volts    |
| Maximum non-repetitive peak reverse voltage                                                            | VRSM     | 75           | 150   | 250   | 450   | 650   | 880   | Volts    |
| Maximum average forward rectified current<br>0.375" (9.5mm) lead length at TA=55°C                     | IAV      | 5.0          |       |       |       |       |       | Amps     |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on<br>rated load (JEDEC Method) | IFSM     | 300.0        |       |       |       |       |       | Amps     |
| Maximum instantaneous forward voltage<br>at 5.0A TJ= 25°C<br>at 15.7A TJ=150°C                         | VF       | 1.10<br>1.05 |       |       |       |       |       | Volts    |
| Maximum reverse current<br>at rated DC blocking voltage TA= 25°C<br>TA=100°C                           | IR       | 10.0<br>1.0  |       |       |       |       |       | µA<br>mA |
| Typical junction capacitance (NOTE 1)                                                                  | CJ       | 300.0        |       |       |       |       |       | pF       |
| Maximum reverse recovery time (NOTE 2)                                                                 | trr      | 200.0        |       |       |       |       |       | ns       |
| Maximum reverse recovery current (NOTE 2)                                                              | IRM(REC) | 2.0          |       |       |       |       |       | Amps     |
| Typical thermal resistance (NOTE 3)                                                                    | RθJA     | 10.0         |       |       |       |       |       | °C/W     |
| Operating junction and storage temperature range                                                       | TJ, TSTG | -50 to +150  |       |       |       |       |       | °C       |

## NOTES

③ Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, with both leads equally to heat sink

## RATINGS AND CHARACTERISTIC CURVES G1820 THRU G1828

FIG. 1 - FORWARD CURRENT DERATING CURVE

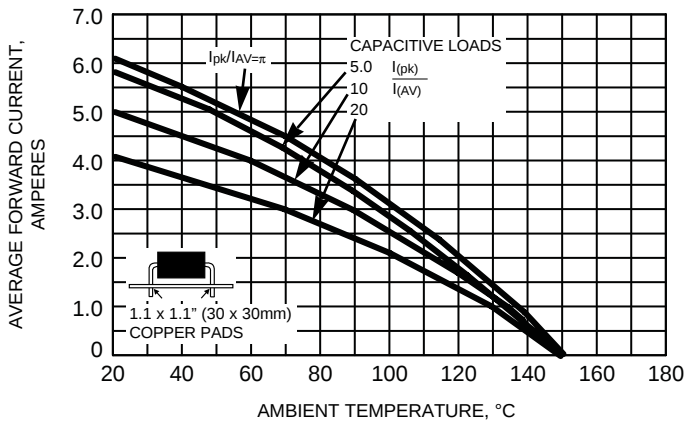


FIG. 2 - FORWARD CURRENT DERATING CURVE

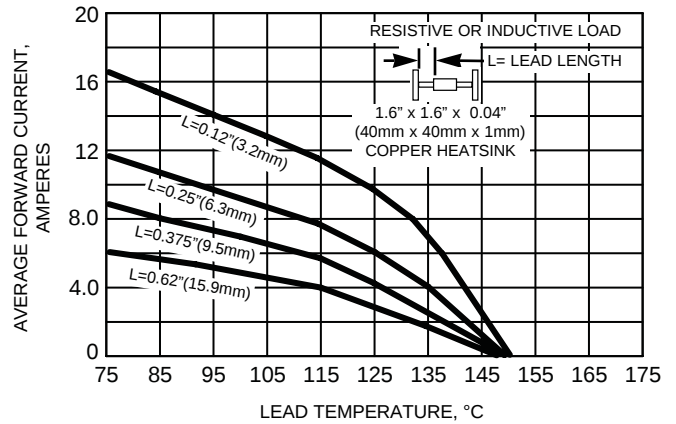


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

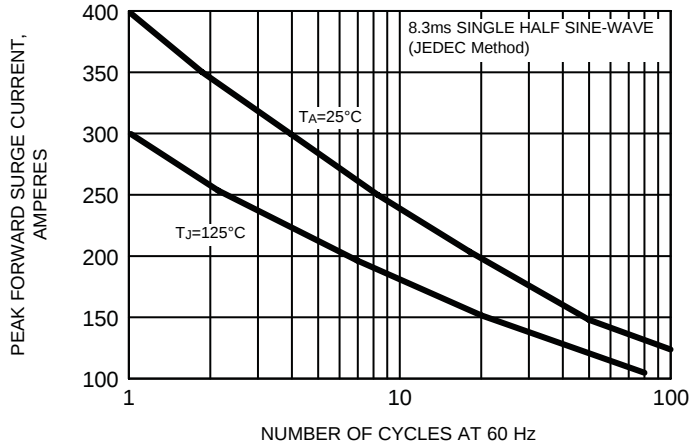


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

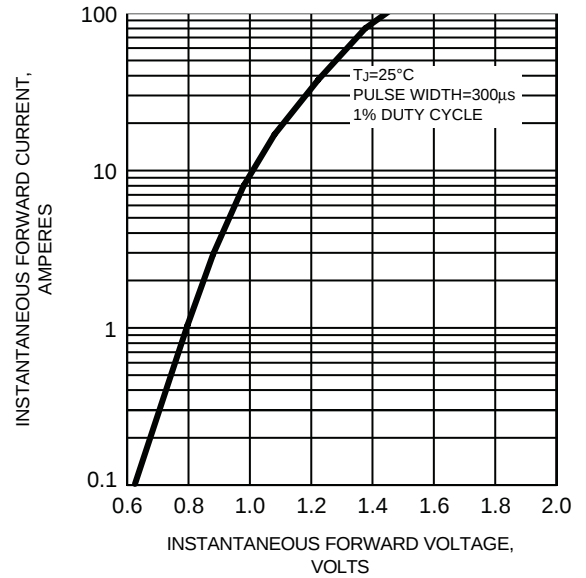


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

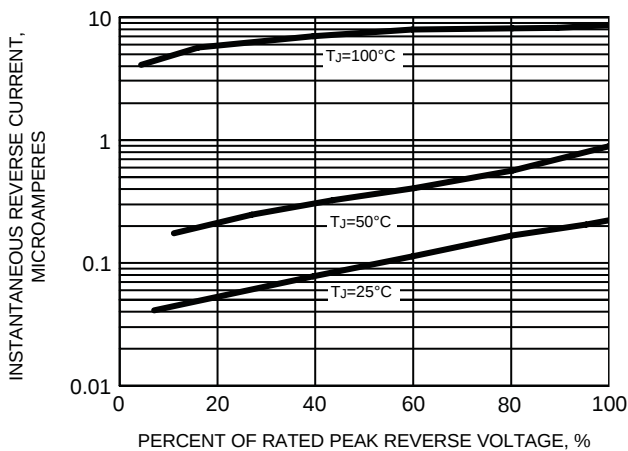


FIG. 6 - TYPICAL THERMAL RESISTANCE

