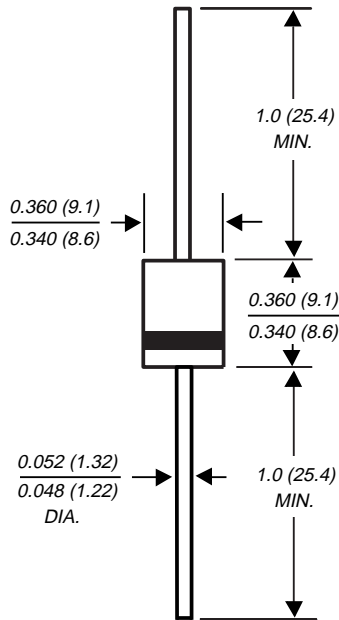




Case Style P600



Dimensions in inches and (millimeters)

Fast Switching Plastic Rectifier

Reverse Voltage 50 to 800 V

Forward Current 5.0 A

Features

- Plastic package has Underwriters Laboratories 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

Mechanical Data

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, 2.1 grams

Maximum Ratings & Thermal Characteristics

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 | V |
| Maximum RMS voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | V |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | V |
| Maximum non-repetitive peak reverse voltage | VRSM | 75 | 150 | 250 | 450 | 650 | 880 | V |
| Maximum average forward rectified current 0.375" (9.5mm) lead length at TA=55°C | IF(AV) | 5.0 | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 300 | | | | | | A |
| Typical thermal resistance (NOTE 1) | RθJA | 10 | | | | | | °C/W |
| Operating junction and storage temperature range | TJ, TSTG | -50 to +150 | | | | | | °C |

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

| | SYMBOLS | GI820 | GI821 | GI822 | GI824 | GI826 | GI828 | UNITS |
|---|----------|--------------|-------|-------|-------|-------|-------|----------|
| Maximum instantaneous forward voltage at 5.0A TJ= 25°C at 15.7A TJ=150°C | VF | 1.10 1.05 | | | | | | V |
| Maximum reverse current at rated DC blocking voltage TA= 25°C TA=100°C | IR | 10 1.0 | | | | | | μA mA |
| Typical junction capacitance at 4.0V, 1MHz | CJ | 300 | | | | | | pF |
| Maximum reverse recovery time IF=1.0A, VR=30V, di/dt=50A/μs, Irr=10% IRM | trr | 200 | | | | | | ns |
| Maximum reverse recovery current IF=1.0A, VR=30V, di/dt=50A/μs | IRM(REC) | 2.0 | | | | | | A |

NOTES:

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

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

