

RGP15A THRU RGP15M



**SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER**
VOLTAGE:50 TO 1000V CURRENT: 1.5A

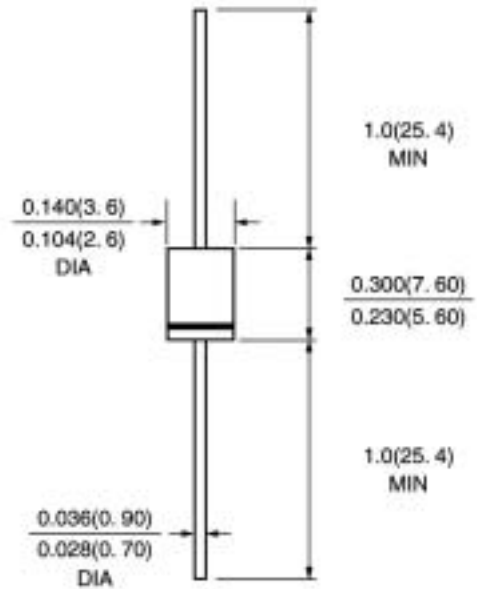
FEATURE

High temperature metallurgically bonded construction
Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
350°C/10sec/0.375"lead length at 5 lbs tension
Operate at Ta =55°C with no thermal run away
Typical Ir<0.1µA

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

DO-15/DO-204C



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

| | SYMBOL | RGP 15A | RGP 15B | RGP 15D | RGP 15G | RGP 15J | RGP 15K | RGP 15M | units |
|---|----------|-------------|---------|---------|---------|---------|---------|---------|----------|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | Vrms | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking Voltage | Vdc | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C | If(av) | 1.5 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 50.0 | | | | | | | A |
| Maximum Forward Voltage at rated Forward Current and 25°C | Vf | 1.3 | | | | | | | V |
| Maximum full load reverse current full cycle average at 55°C Ambient | Ir(av) | 100.0 | | | | | | | µA |
| Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C | Ir | 5.0 200 | | | | | | | µA µA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 150 | | | 250 | | 500 | | nS |
| Typical Junction Capacitance (Note 2) | Cj | 25.0 | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | R(ja) | 45.0 | | | | | | | °C /W |
| Storage and Operating Junction Temperature | Tstg, Tj | -65 to +175 | | | | | | | °C |

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES RGP15A THRU RGP15M

FIG. 1 - FORWARD CURRENT DERATING CURVE

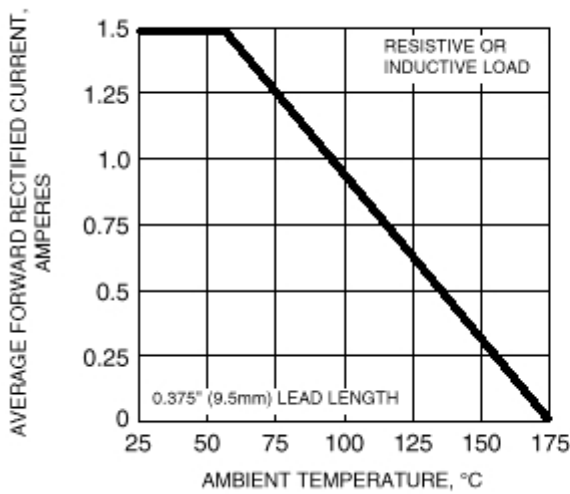


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

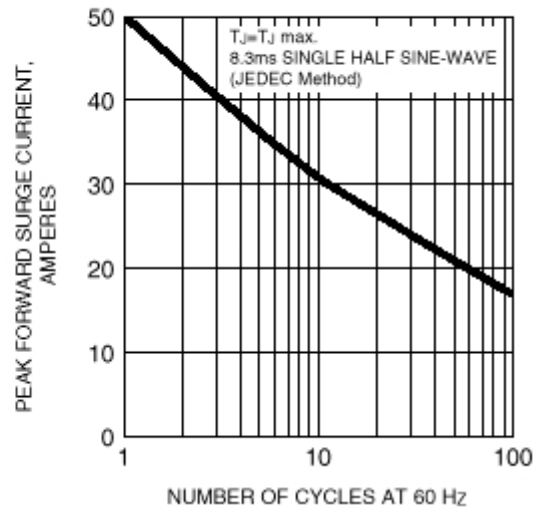


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

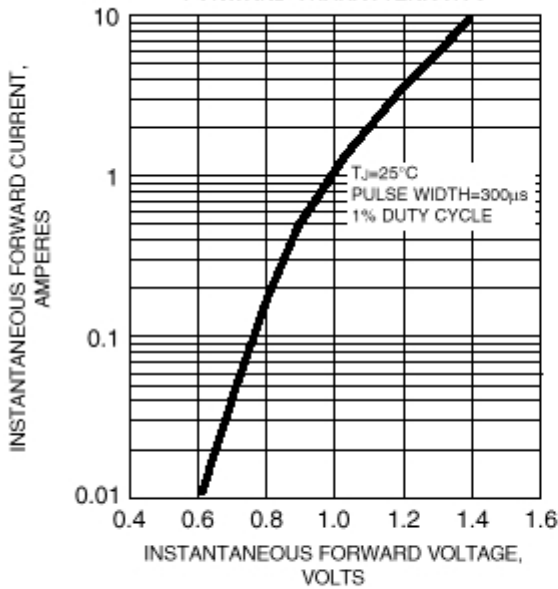


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

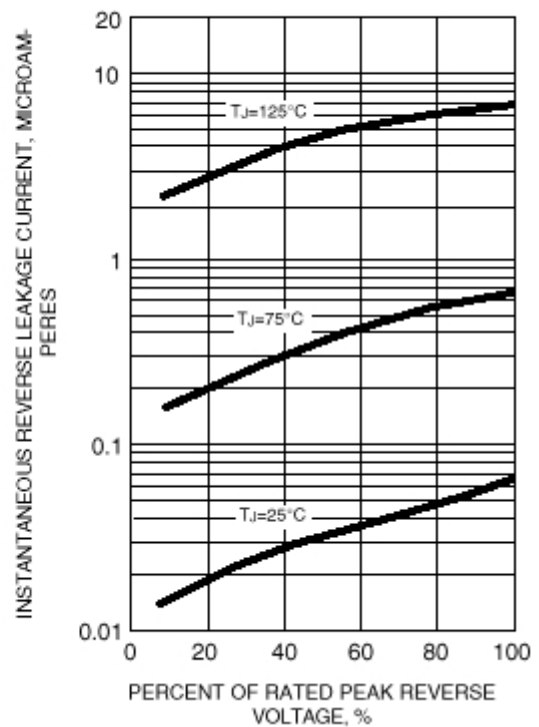


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

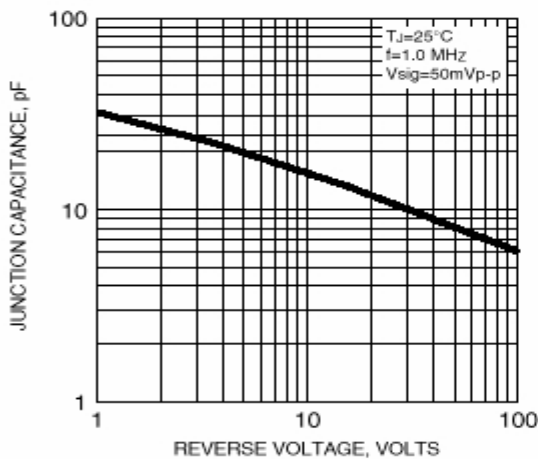


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

