



WRGP10AH THRU WRGP10MH

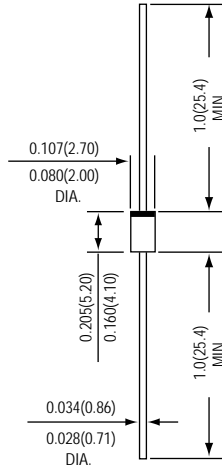
SINTERED GLASS PASSIVATED JUNCTION FAST RECOVERY RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.0 Ampere

PATENTED

DO-204AL



*Dimensions in inches and (millimeters)

SUPEREX II™



FEATURES

- * Halogen-free type
- * GPRC (Glass Passivated Rectifier Chip) inside
- * Glass passivated cavity-free junction
- * Capable of meeting environmental standards of MIL-S-19500
- * For use in high frequency rectifier circuits
- * Fast switching for high efficiency
- * Typical IR less than 0.1uA
- * High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

Case : JEDEC DO-204AL molded plastic over glass body

Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

Weight : 0.012 ounces , 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Ratings at 25 °C ambient temperature unless otherwise specified. | SYMBOLS | WRGP10 | | | | | | | | | | UNITS | |
|--|---------|---------------|-----|-----|-----|-----|-----|-----|-----|------|------|--------|----|
| | | AH | BH | DH | GH | JH | JAH | KH | KAH | MH | MAH | | |
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 600 | 800 | 800 | 1000 | 1000 | Volts | |
| Maximum RMS voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 420 | 560 | 560 | 700 | 700 | Volts | |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 600 | 800 | 800 | 1000 | 1000 | Volts | |
| Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG.1) | I (AV) | 1.0 | | | | | | | | | | Amps | |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 30 | | | | | | | | | | Amps | |
| Maximum instantaneous forward voltage at 1.0 A | VF | 1.3 | | | | | | | | | | Volts | |
| Maximum DC reverse current at rated DC blocking voltage TA=25°C TA=125°C TA=150°C | IR | 2 30 50 | | | | | | | | | | uA | |
| Maximum reverse recovery time (NOTE 1) | trr | 150 | | | 250 | 150 | 500 | 300 | 500 | 300 | | | nS |
| Typical junction capacitance (NOTE 2) | CJ | 15 | | | | | | | | | | pF | |
| Typical thermal resistance (NOTE 3) | R θJA | 55 | | | | | | | | | | °C / W | |
| Operating junction and storage temperature range | TJ,TSTG | -65 to +175 | | | | | | | | | | °C | |

NOTES : (1) Reverse recovery test condition : IF 0.5A, IR=1.0A, Irr=0.25A
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
 (3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead lengths, P.C.B. mounted.

RATINGS AND CHARACTERISTIC CURVES WRGP10AH THRU WRGP10MH

FIG.1 - FORWARD CURRENT DERATING CURVE

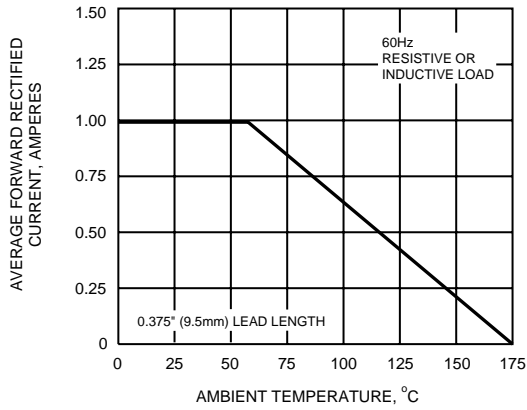


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

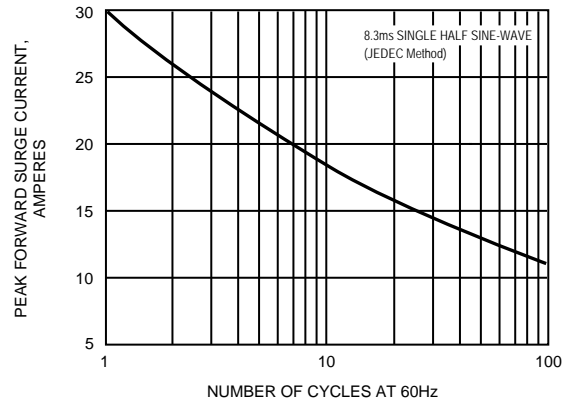


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

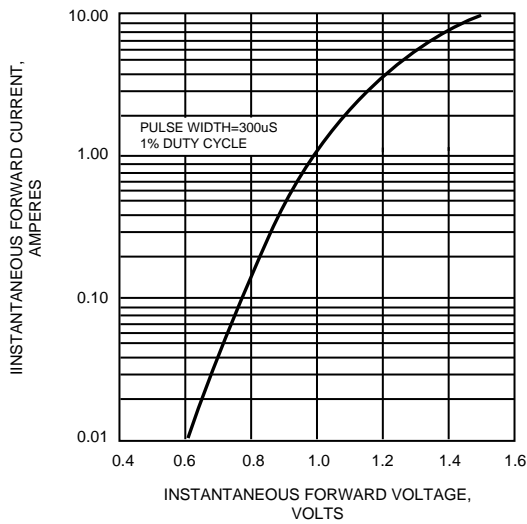


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

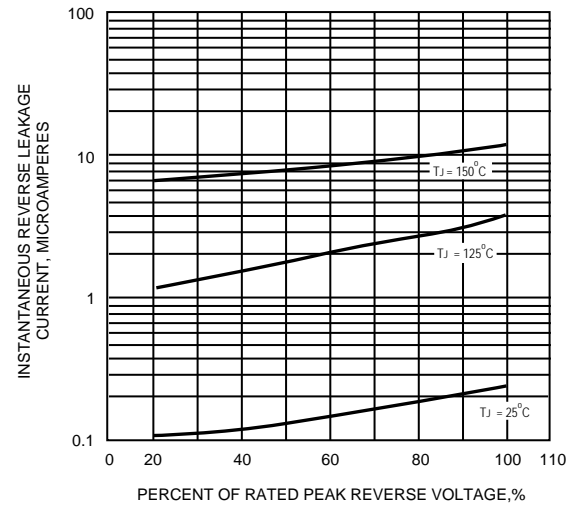


FIG.5 - TYPICAL JUNCTION CAPACITANCE

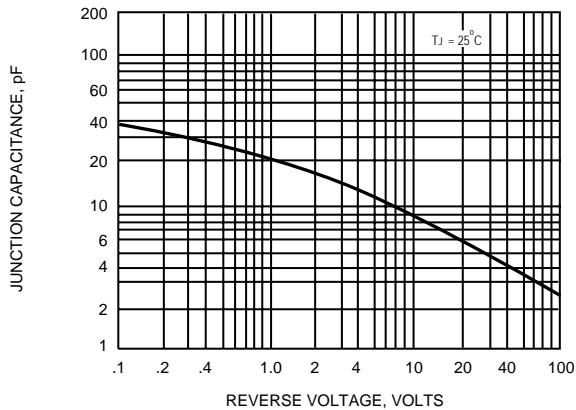


FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

