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1.5A GENERAL PURPOSE PLASTIC SILICON RECTIFIER

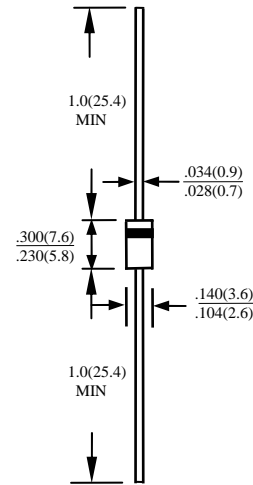
GP15-005G THRU GP15-10G

FEATURES

- LOW FORWARD VOLTAGE
- HIGH CURRENT CAPABILITY
- LOW LEAKAGE CURRENT
- HIGH SURGE CAPABILITY
- LOW COST
- GLASS PASSIVATED CHIP JUNCTION

MECHANICAL DATA

- CASE: DO15, MOLDED PLASTIC USE UL 94V-0 RECOGNIZED FLAME RETARDANT EPOXY, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINAL: AXIAL LEADS, SOLDERABLE PER MIL-STD-202 METHOD 208
- POLARITY: COLOR BAND DENOTES CATHODE
- MOUNTING POSITION: ANY
- WEIGHT: 0.4 GRAMS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTIC RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

| RATINGS | SYMBOL | GP15 -005G | GP15 -01G | GP15 -02G | GP15 -04G | GP15 -06G | GP15- 08G | GP15- 10G | UNITS |
|--|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|
| MAXIMUM RECURRENT PEAK REVERSE VOLTAGE | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| MAXIMUM RMS VOLTAGE | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| MAXIMUM DC BLOCKING VOLTAGE | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT 0.375"(9.5mm) LEAD LENGTH AT $T_A=55^\circ\text{C}$ | I_O | 1.5 | | | | | | | A |
| PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD | I_{FSM} | 50 | | | | | | | A |
| TYPICAL JUNCTION CAPACITANCE (NOTE 1) | C_j | 15 | | | | | | | PF |
| TYPICAL THERMAL RESISTANCE (NOTE 2) | $R_{\theta ja}$ | 40 | | | | | | | $^\circ\text{C/W}$ |
| OPERATING TEMPERATURE RANGE | T_{OP} | - 55 TO + 175 | | | | | | | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS ($A_T T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

| CHARACTERISTICS | SYMBOL | GP15 -005G | GP15 -01G | GP15 -02G | GP15 -04G | GP15 -06G | GP15- 08G | GP15- 10G | UNITS |
|-------------------------------------|--------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| MAXIMUM FORWARD VOLTAGE AT I_O DC | V_F | 1.1 | | | | | | | V |
| MAXIMUM REVERSE CURRENT AT 25°C | I_R | 5 | | | | | | | μA |
| MAXIMUM REVERSE CURRENT AT 100°C | I_R | 50 | | | | | | | μA |

- NOTE: 1. MEASURED AT 1MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEAT SINK 20x20x1t(mm) COPPER PLATE AT LEAD LENGTH 5mm

RATINGS AND CHARACTERISTIC CURVE GP15-005G THRU GP15-10G

FIG. 1 - FORWARD CURRENT DERATING CURVE

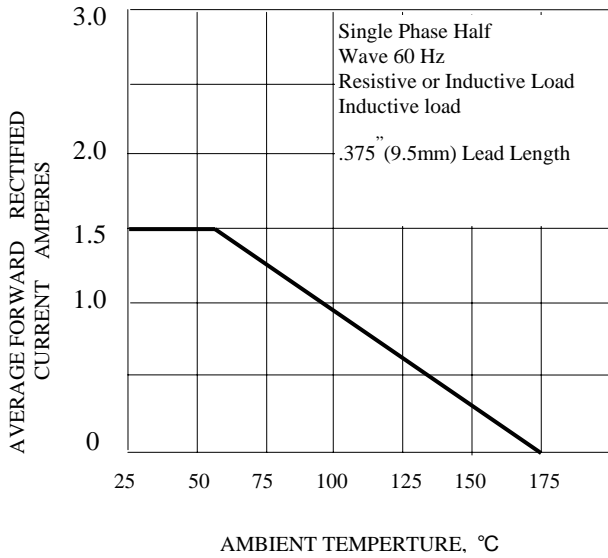


FIG. 2-PEAK FORWARD SURGE CURRENT

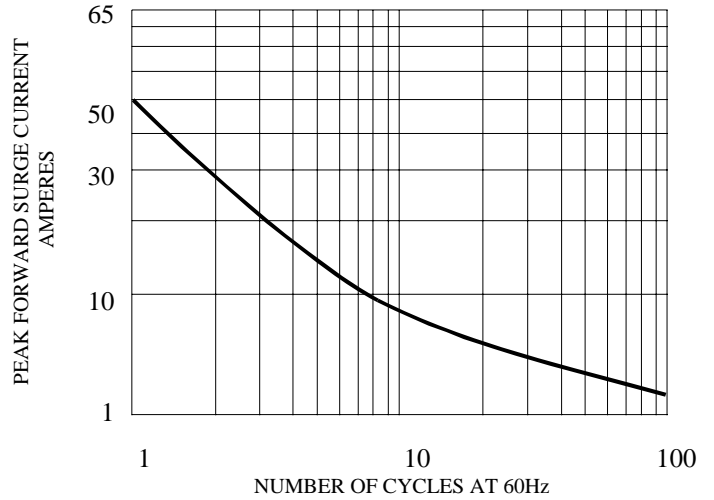


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

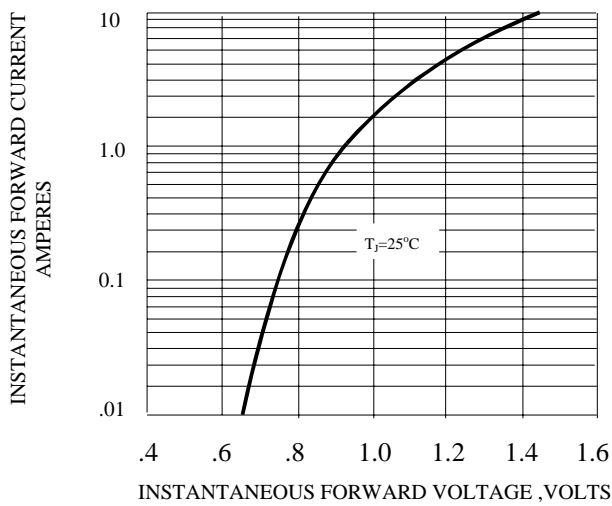


FIG. 4-TYPICAL JUNCTION CAPACITANCE

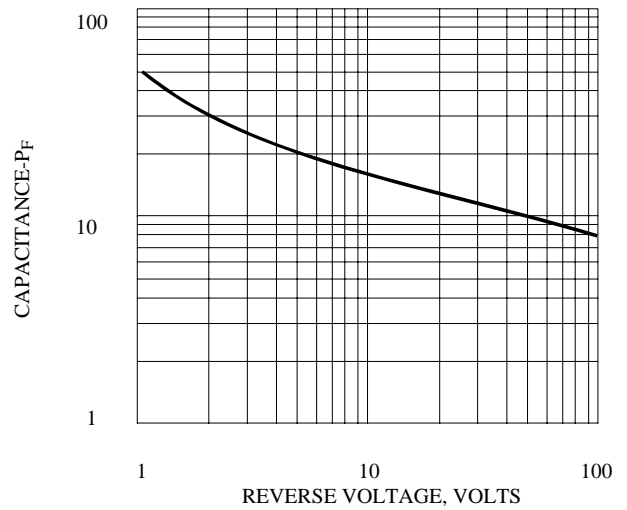


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

