



HIGH VOLTAGE SILICON RECTIFIER

R1200 THRU R5000

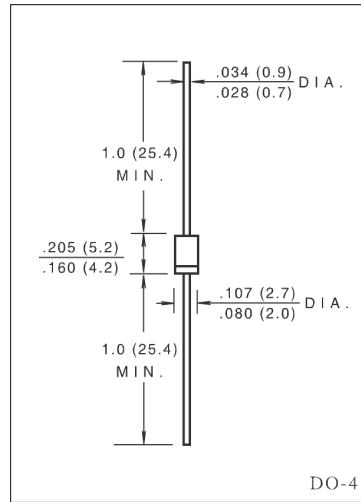
VOLTAGE RANGE 1200 to 5000 Volts
CURRENT 0.2 - 0.5 Amperes

FEATURES

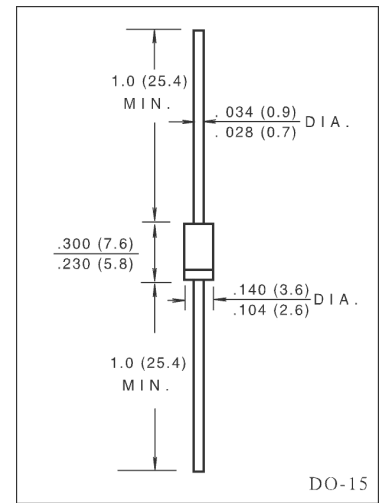
- Low leakage
- High surge capability
- High current capability
- High temperature soldering guaranteed:
260°C/10 seconds. 0.375" (9.5mm) lead length
at 5lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V - 0 rate flame retardant
- Polarity: Color band denotes cathode end.
- Lead: Plated slug, solderable per MIL - STD 202 E
method 208C
- Mounting position: Any
- Weight: 0.012 ounce, 0.33grams (DO-41)
0.014 ounce, 0.39 grams (DO-15)



(R1200 - R2000)



(R2500 - R5000)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%

| | SYMBOLS | R1200 | R1500 | R1800 | R2000 | R2500 | R3000 | R4000 | R5000 | UNIT |
|--|----------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 1200 | 1500 | 1800 | 200 | 2500 | 3000 | 4000 | 5000 | Volts |
| Maximum RMS Voltage | V_{RMS} | 840 | 1050 | 1260 | 1400 | 1750 | 2100 | 2800 | 3500 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 1200 | 1500 | 1800 | 2000 | 2500 | 3000 | 4000 | 5000 | Volts |
| Maximum Average Forward Rectified Current, 0.375" (9.5mm) Lead length at $T_A = 50^\circ\text{C}$ | $I_{(AV)}$ | 500 | | | | 200 | | | | mA |
| Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method) | I_{FSM} | 30 | | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage Drop at 0.5A / 0.2A | V_F | 2.0 | | 3.0 | | 4.0 | | 5.0 | | Volts |
| Maximum DC Reverse Current at rated DC blocking voltage | I_R | $T_A = 25^\circ\text{C}$ | | | | | | | | |
| | | $T_C = 100^\circ\text{C}$ | | | | | | | | |
| Maximum Full Load Reverse Current, full cycle average 0.375" (9.5mm) lead length at $T_L = 75^\circ\text{C}$ | $I_{R(AV)}$ | 30 | | | | | | | | μA |
| Operating and Storage Temperature Range | T_J, T_{STG} | (-65 to +150) | | | | | | | | $^\circ\text{C}$ |

RATINGS AND CHARACTERISTIC CURVES R1200 THRU R5000

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

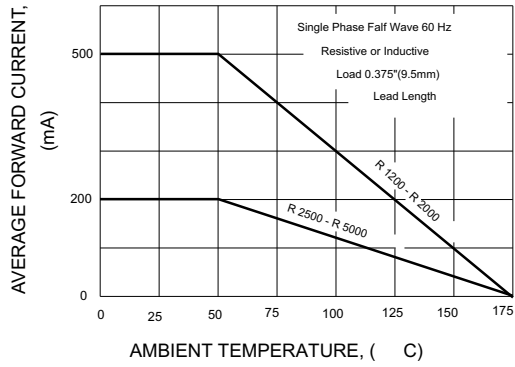


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

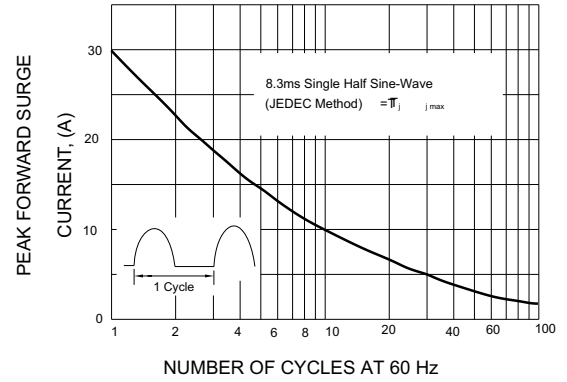


FIG.3-TYPICAL REVERSE
CHARACTERISTICS

