



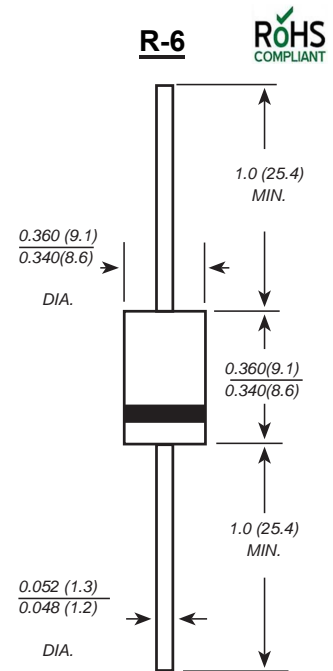
GENERAL PURPOSE SILICON RECTIFIER

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

Case : JEDEC R-6 Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.072 ounce, 2.05 grams



Dimensions in inches and (millimeters)

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 current derate by 20%.

| Parameter | SYMBOLS | MDD 15A10 | UNITS |
|--|-----------------|--------------|--------------|
| Marking Code | | | |
| Maximum repetitive peak reverse voltage | V_{RRM} | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 1000 | V |
| Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=75^\circ C$ | $I_{(AV)}$ | 15.0 | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 500 | A |
| Maximum instantaneous forward voltage at 15.0A | V_F | 1.0 | V |
| Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$ | I_R | 5.0 200 | μA |
| Typical junction capacitance (NOTE 1) | C_J | 150 | pF |
| Typical thermal resistance (NOTE 2) | $R_{\theta JA}$ | 15.0 | $^\circ C/W$ |
| Operating junction and storage temperature range | T_J, T_{STG} | -65 to +175 | $^\circ C$ |

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. Thermal Resistance Junction to Ambient.



15A10

Reverse Voltage - 1000 Volts Forward Current - 15.0 Ampere

Ratings And Characteristic Curves

FIG. 1 -- TYPICAL FORWARD CHARACTERISTIC

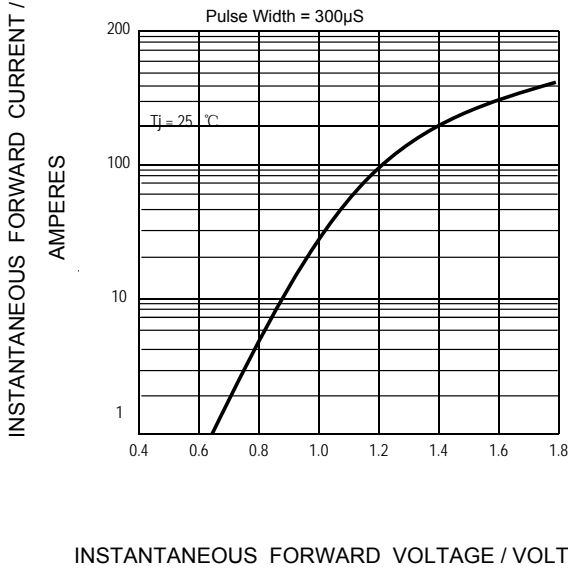


FIG. 2 -- TYPICAL JUNCTION CAPACITANCE

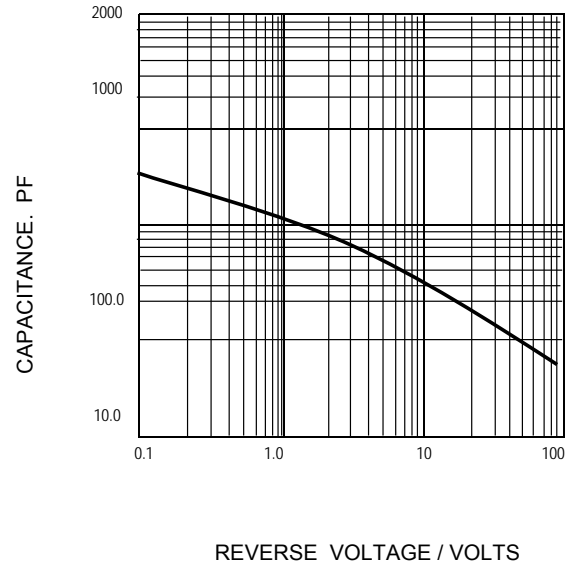


FIG. 3 -- FORWARD CURRENT DERATING CURVE

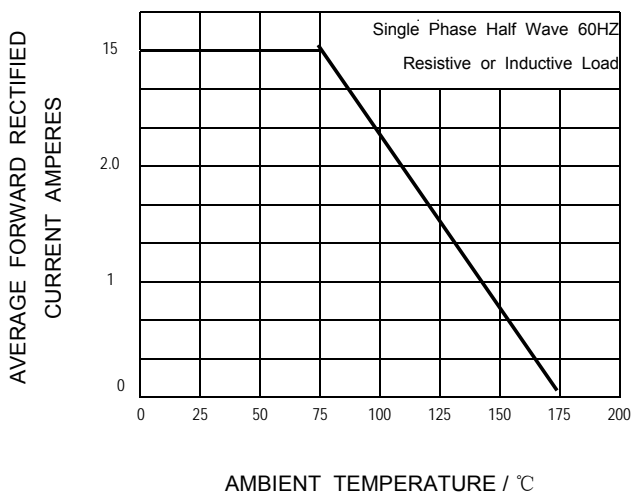
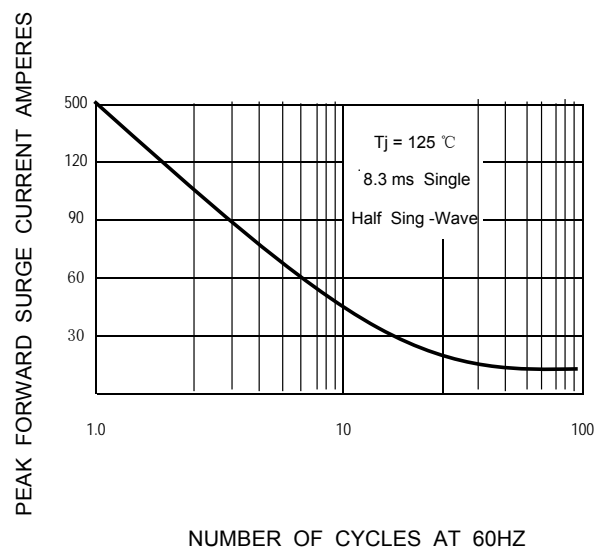


FIG. 4 -- PEAK FORWARD SURGE CURRENT



The curve above is for reference only.