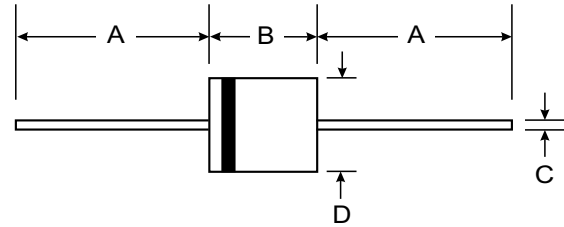


Features

- High Surge Current Capability
- Low Leakage and Forward Voltage Drop



Mechanical Data

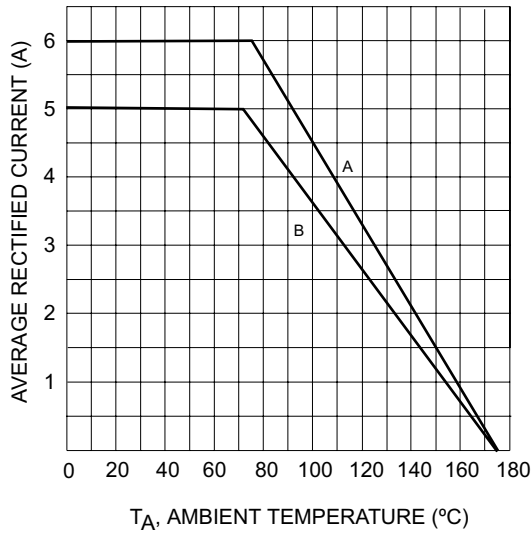
- Case: R-6, Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Indicates Cathode
- Approx. Weight: 2.1 grams
- Plastic Material - UL Flammability Classification 94V-0

| R-6 | | |
|----------------------|-------|------|
| Dim | Min | Max |
| A | 25.40 | — |
| B | 8.60 | 9.10 |
| C | 1.20 | 1.30 |
| D | 8.60 | 9.10 |
| All Dimensions in mm | | |

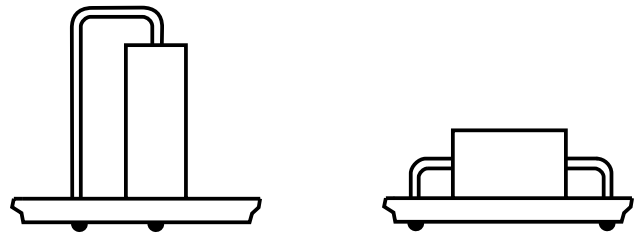
Maximum Ratings and Electrical Characteristics @25°C unless otherwise specified

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, halfwave, 60Hz, resistive or inductive load.

| Characteristic | Symbol | 6A05 | 6A1 | 6A2 | 6A4 | 6A6 | 6A8 | 6A10 | Unit |
|--|----------------|-------------|-----|-----|-----|-----|-----|------|------------------|
| 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 9.5mm lead length @ $T_A = 75^\circ\text{C}$ (See Fig. 1) | $I_{(AV)}$ | 6.0 | | | | | | | A |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 400 | | | | | | | A |
| Maximum Instantaneous Forward Current at 6.0A DC | V_F | 0.90 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated Blocking Voltage @ $T_A = 100^\circ\text{C}$ | I_R | 10 100 | | | | | | | μA |
| Operating and Storage Temperature Range | T_J, T_{STG} | -65 to +175 | | | | | | | $^\circ\text{C}$ |



Output Current Derating Curve

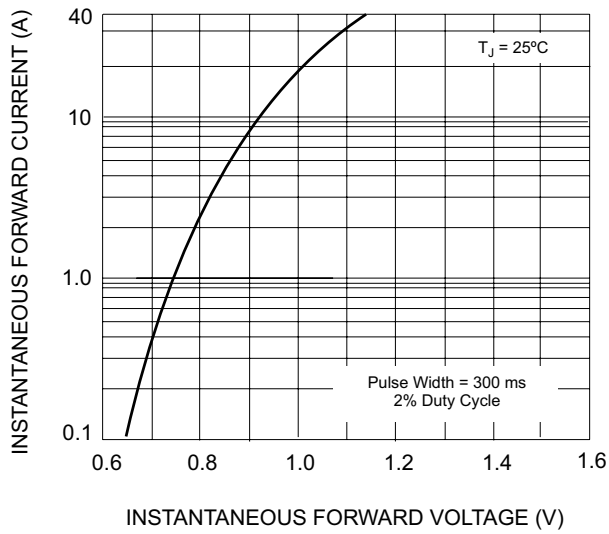


Recommended Method
(See Derating "A")

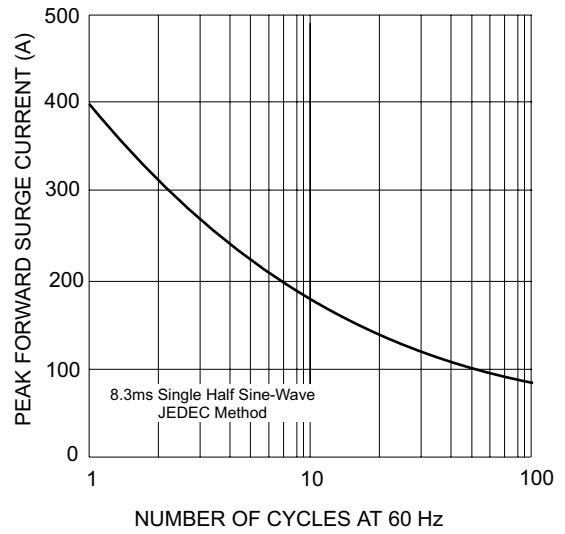
Standard Method
(See Derating "B")

Ground Plane: 25mm² equivalent copper surface area

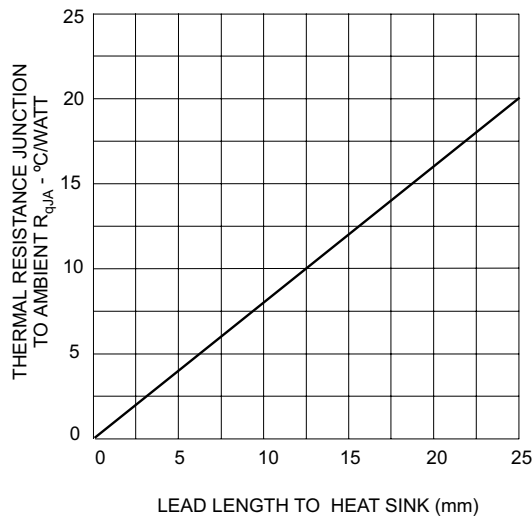
Printed Circuit Board Mounting Method



Typical Forward Characteristics



Maximum Non-Repetitive Peak Forward Surge Current



Typical Thermal Resistance
(Using Standard Mounting Method "B")