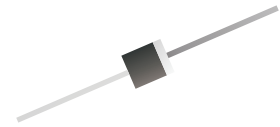


## 6A005-G Thru. 6A10-G

Voltage: 50 to 1000 V

Current: 6.0 A

RoHS Device

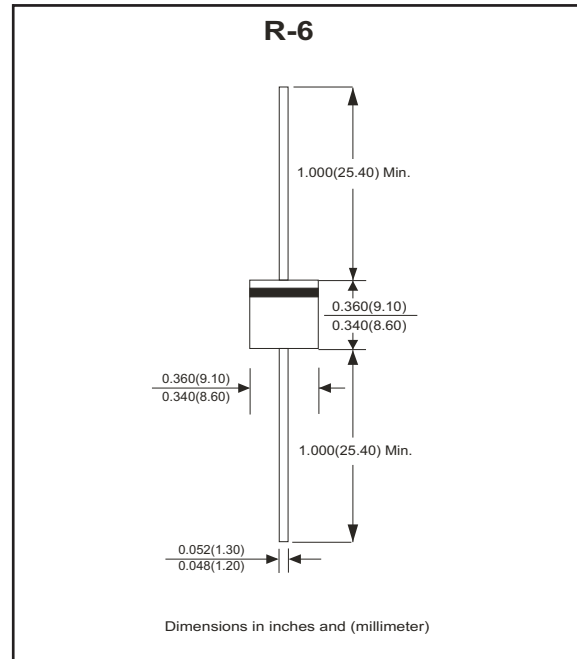


### Features

- Low cost construction.
- Diffused Junction.
- Low forward voltage drop.
- High current capability.

### Mechanical data

- Epoxy: UL 94V-0 rate flame retardant
- Case: JEDEC R-6 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.07ounce, 2.0 grams
- Mounting position: Any



### Electrical Characteristics (at TA=25°C unless otherwise noted)

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%.

| Parameter   | Symbol          | 6A005-G    | 6A01-G | 6A02-G | 6A04-G | 6A06-G | 6A08-G | 6A10-G | Unit |
|---|-----------------|------------|--------|--------|--------|--------|--------|--------|------|
| Maximum repetitive 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<br>0.375"(9.5mm) lead length @TA=75 °C                        | $I_{(AV)}$      | 6.0        |        |        |        |        |        |        | A    |
| Peak forward surge current, 8.3ms single<br>half sine-wave superimposed on rated load<br>(JEDEC method) | $I_{FSM}$       | 400        |        |        |        |        |        |        | A    |
| Maximum forward voltage at 6.0A DC  | $V_F$           | 1.0        |        |        |        |        |        |        | V    |
| Maximum reverse current<br>at rated DC blocking voltage   | TA=25°C         | 10         |        |        |        |        |        |        | µA   |
|   | TA=100°C        | 100        |        |        |        |        |        |        |      |
| Typical junction capacitance (Note 1)   | $C_J$           | 100        |        |        |        |        |        |        | PF   |
| Typical thermal resistance (Note 2)   | $R_{\theta JA}$ | 10         |        |        |        |        |        |        | °C/W |
| Operating temperature range   | $T_J$           | -55 ~ +125 |        |        |        |        |        |        | °C   |
| Storage temperature range   | $T_{STG}$       | -55 ~ +150 |        |        |        |        |        |        | °C   |

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0Volts.
2. Thermal resistance from junction to ambient .

## RATING AND CHARACTERISTIC CURVES (6A005-G Thru. 6A10-G)

Fig.1- Forward Current Derating Curve

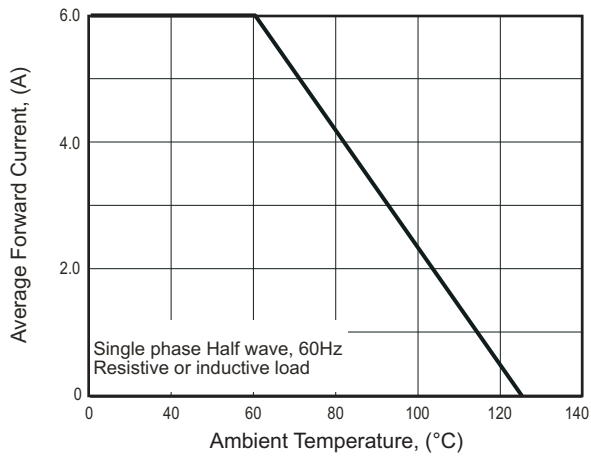


Fig.2- Maximum Non-repetitive Surge Current

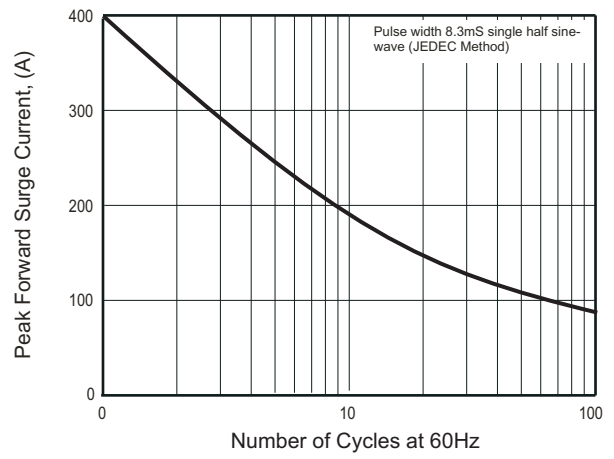


Fig.3- Typical Junction Capacitance

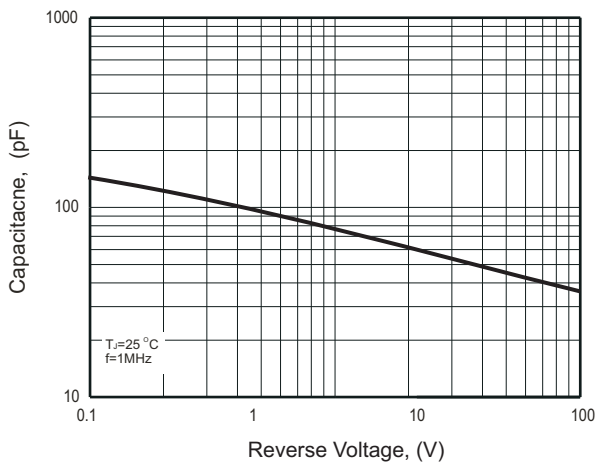
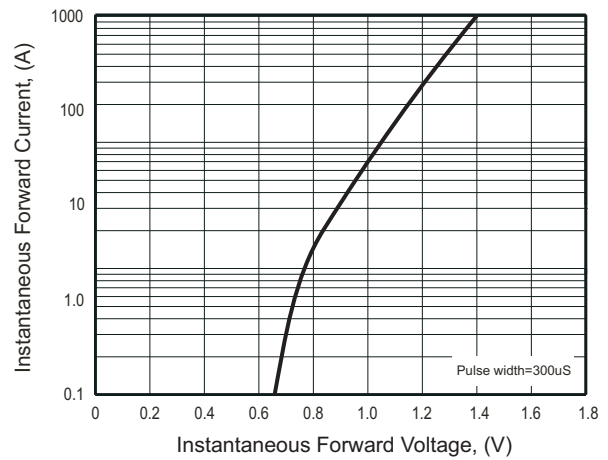


Fig.4- Typical Forward Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| 6A005-G     | 6A05         |
| 6A01-G      | 6A1          |
| 6A02-G      | 6A2          |
| 6A04-G      | 6A4          |
| 6A06-G      | 6A6          |
| 6A08-G      | 6A8          |
| 6A10-G      | 6A10         |
| 6A005B-G    | 6A05         |
| 6A01B-G     | 6A1          |
| 6A02B-G     | 6A2          |
| 6A04B-G     | 6A4          |
| 6A06B-G     | 6A6          |
| 6A08B-G     | 6A8          |
| 6A10B-G     | 6A10         |



XXX / XXXX = Product type marking code

## Standard Packaging

| Case Type | AMMO PACK |                   |             |
|-----------|-----------|-------------------|-------------|
|           | Box (EA)  | Box / Carton (EA) | CARTON (EA) |
| R-6       | 500       | 10                | 5,000       |

| Case Type | BULK PACK |                   |             |
|-----------|-----------|-------------------|-------------|
|           | Box (EA)  | Box / Carton (EA) | CARTON (EA) |
| R-6       | 250       | 24                | 6,000       |