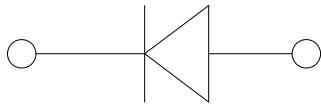
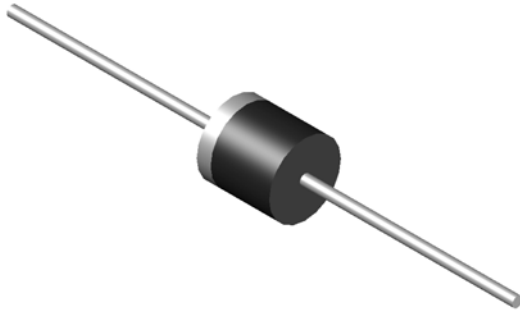


## General Purpose Rectifier



### Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Mechanical Data

- **Package:** R-6  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER   | SYMBOL             | UNIT | P6A05G    | P6A1G | P6A2G | P6A4G | P6A6G | P6A8G | P6A10G |
|---|--------------------|------|-----------|-------|-------|-------|-------|-------|--------|
| Device marking code   |                    |      | P6A05G    | P6A1G | P6A2G | P6A4G | P6A6G | P6A8G | P6A10G |
| Repetitive Peak Reverse Voltage   | VRRM               | V    | 50        | 100   | 200   | 400   | 600   | 800   | 1000   |
| Average Forward Current @60Hz sine wave, Resistance load, T <sub>a</sub> =75°C            | I <sub>F(AV)</sub> | A    | 6.0       |       |       |       |       |       |        |
| Surge(Non-repetitive)Forward Current @ 60Hz Half-sine wave, 1 cycle, T <sub>a</sub> =25°C | IFSM               | A    | 200       |       |       |       |       |       |        |
| Storage Temperature   | T <sub>stg</sub>   | °C   | -55 ~+150 |       |       |       |       |       |        |
| Junction Temperature  | T <sub>j</sub>     | °C   | -55~+150  |       |       |       |       |       |        |

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER   | SYMBOL            | UNIT | TEST CONDITIONS  | P6A05G | P6A1G | P6A2G | P6A4G | P6A6G | P6A8G | P6A10G |
|---|-------------------|------|--|--------|-------|-------|-------|-------|-------|--------|
| Maximum instantaneous forward voltage drop per diode              | V <sub>FM</sub>   | V    | I <sub>FM</sub> =6.0A                                      | 1.1    |       |       |       |       |       |        |
| Maximum DC reverse current at rated DC blocking voltage per diode | I <sub>RRM1</sub> | μA   | T <sub>a</sub> =25°C                                       | 2.5    |       |       |       |       |       |        |
|   | I <sub>RRM2</sub> |      | T <sub>a</sub> =125°C                                      | 50     |       |       |       |       |       |        |
| Typical junction capacitance                                      | C <sub>j</sub>    | pF   | Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C. | 80     |       |       |       |       |       |        |

### ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                   | SYMBOL            | UNIT | P6A05G | P6A1G | P6A2G | P6A4G | P6A6G | P6A8G | P6A10G |
|-----------------------------|-------------------|------|--------|-------|-------|-------|-------|-------|--------|
| Thermal Resistance(Typical) | R <sub>θJ-A</sub> | °C/W | 12     |       |       |       |       |       |        |



# P6A05G THRU P6A10G

## Ordering Information (Example)

| PREFERRED P/N | PACKAGE CODE | UNIT WEIGHT(g)   | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|------------------|----------------------|-------------------------|----------------------------|---------------|
| P6A05G~P6A10G | D1           | Approximate 1.95 | 500                  | 500                     | 5000                       | Tape          |
| P6A05G~P6A10G | C1           | Approximate 1.95 | 100                  | 100                     | 5000                       | Bulk          |

## Characteristics (Typical)

FIG.1: I<sub>o</sub>-T<sub>a</sub> Curve

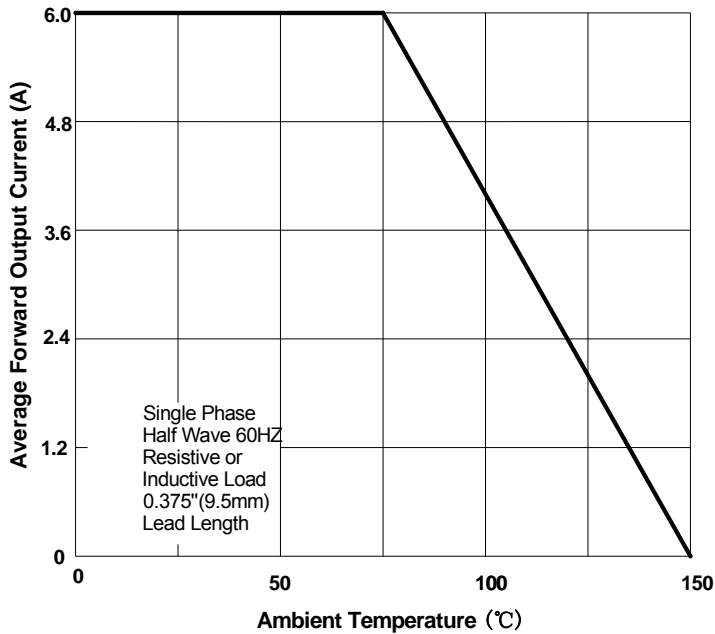


FIG.2: Surge Forward Current Capability

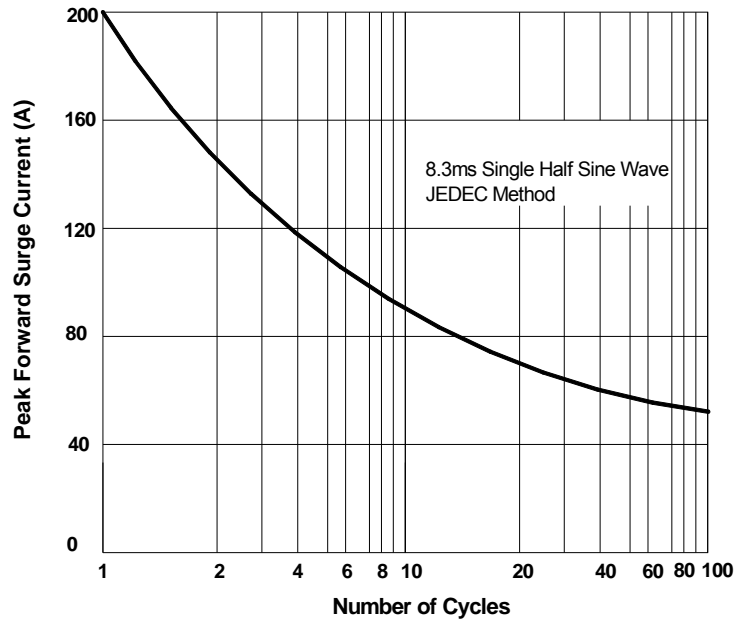


FIG.3: Forward Voltage

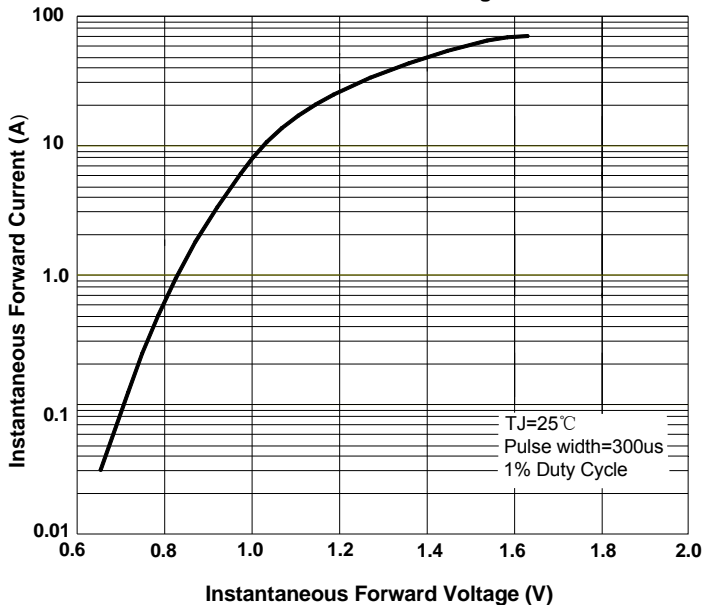
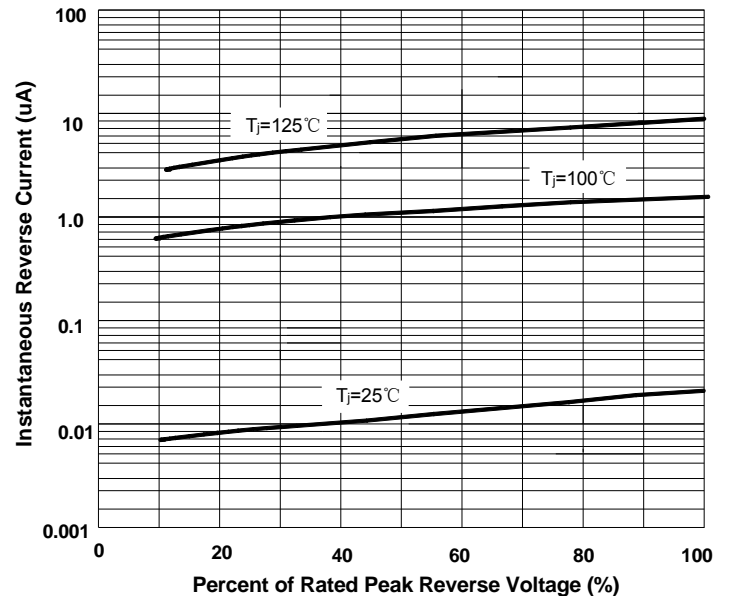


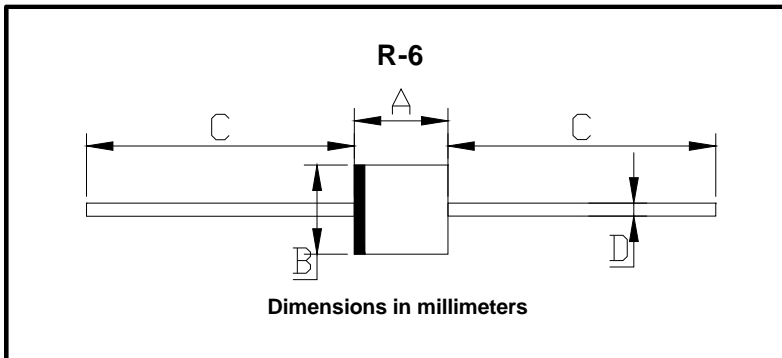
FIG.4: Typical Reverse Characteristics





## P6A05G THRU P6A10G

### ■ Outline Dimensions



| R-6 |      |      |
|-----|------|------|
| Dim | Min  | Max  |
| A   | 8.60 | 9.10 |
| B   | 8.60 | 9.10 |
| C   | 25.4 | /    |
| D   | 1.20 | 1.32 |



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