# P600A/P6A05 **THRU** P600M/P6A10

## 6.0 AMPS. Silicon Rectifiers

PLASTIC SILICON RECTIFIERS

**Voltage Range**
**-50 to 1000 V olts**
**Current**
**-6.0Amperes**

### Features

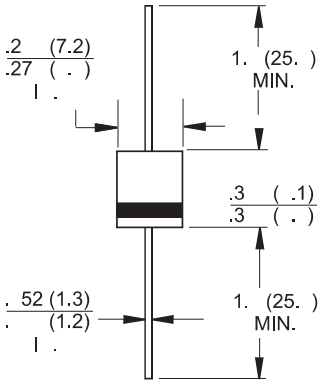
- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0



### Mechanical Data

- Cases: JEDEC DO-15 molded plastic
- Polarity: Color band denotes cathode
- W eight: 0.07 ounces, 2.1 grams
- Mounting position: Any

R-6




### Maximum Ratings and Electrical Characteristics

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

| Type Number | P600A / P6A05 | P600B / P6A1 | P600D / P6A2 | P600G / P6A4 | P600J / P6A6 | P600K / P6A8 | P600M / P6A10 | Units |
|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse V oltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS V oltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking V oltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum A verage Forward Rectified Current .375 (9.5mm) Lead Length @T A = 60℃ | 6.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method ) | 400 | | | | | | | A |
| Maximum Instantaneous Forward V oltage @ 6.0A | 1.0 | | | | | | | V |
| Maximum DC Reverse Current @ TJ =25℃<br>at Rated DC Blocking V oltage @ T J =100℃ | 10<br>100 | | | | | | | uA<br>uA |
| Typical Junction Capacitance ( Note 1 ) | 100 | | | | | | | pF |
| Typical Thermal Resistance R JA ( Note 2 ) | 10 | | | | | | | CW |
| Operating T emperature Range T J | -55 to +125 | | | | | | | C |
| Storage T emperature Range T STG | -55 to +150 | | | | | | | C |

**Notes: 1. Measured at 1 MHz and Applied Reverse V oltage of 4.0 V D.C.**
**2. Thermal Resistanc of Lead.**

# RATINGS AND CHARACTERISTIC CURVES (6A05 THRU 6A100)

FIG.1- MAXIMUM OUTPUT CURRENT VS AMBIENT TEMPERATURE

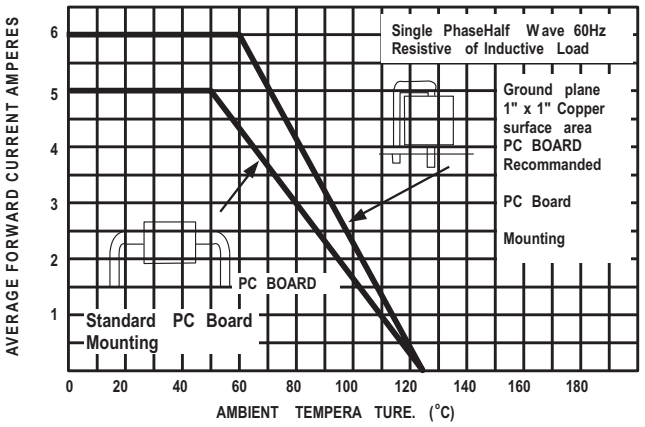





FIG.2- TYPICAL FORWARD CHARACTERISTICS

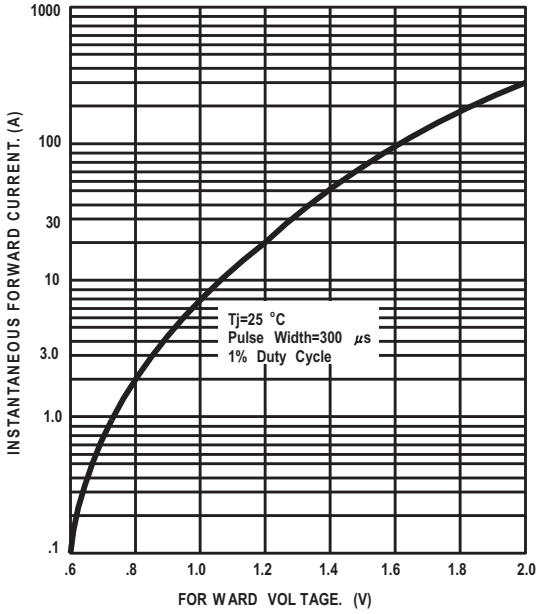



FIG.3- TYPICAL REVERSE CHARACTERISTICS

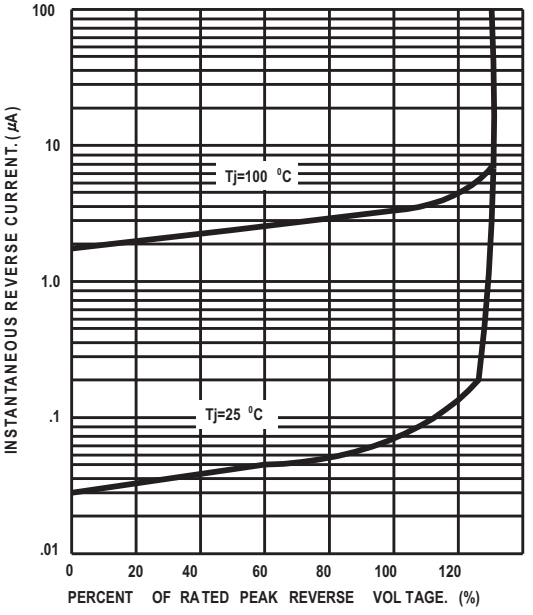



FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

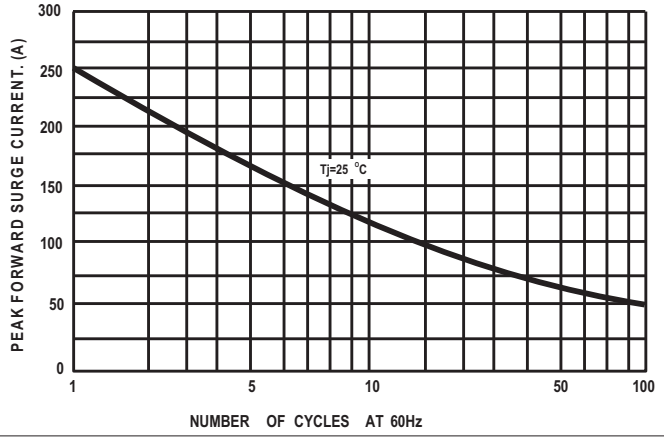



FIG.5- TYPICAL JUNCTION CAPACITANCE