20 STERN AVE. SPRINGFIELD, NEW JERSEY 07081 U.S.A.

## 6A05 THRU 6A100

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6.0 AMPS. Silicon Rectifiers

|           | Ŭ   | Voltage Range<br>50 to 1000 Volts<br>Current<br>6.04mperes |
|-----------|---|--|
| Fe        | atures  | <u>R-6</u>   |
| ♦ ♦ ♦ Me  | Low forward voltage drop High current capability High reliability High surge current capability chanical Data   | .280 (7.2)<br>.270 (6.8)<br>                               |
| <b>**</b> | Cases: Molded plastic Epoxy: UL 94V-O rate flame retardant Lead: Axial leads, solderable per MIL- STD-202, Method 208 guaranteed Polarity: Color band denotes cathode end High temperature soldering guaranteed: 250°C/10 seconds/.375",(9.5mm) lead lengths at 5 lbs., (2.3kg) tension | .052 (1.3)<br>.048 (1.2)<br>.01A                           |
| <b>*</b>  | Weight: 1.65 grams  | Dimensions in Inches and (millimeters)                     |

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

| Type Number  |             | 6A10 | 6A20 | 6A40 | 6A60 | 6A80 | 6 <b>A</b> 100 | Units |  |
|--|-------------|------|------|------|------|------|----------------|-------|--|
| Maximum Recurrent Peak Reverse Voltage   | 50          | 100  | 200  | 400  | 600  | 800  | 1000           | V     |  |
| Maximum RMS Voltage  | 35          | 70   | 140  | 280  | 420  | 560  | 700            | V_    |  |
| Maximum DC Blocking Voltage  | 50          | 100  | 200  | 400  | 600  | 800  | 1000           | V     |  |
| Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @T <sub>A</sub> = 60°C                |             | 6.0  |      |      |      |      |                |       |  |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated Load<br>(JEDEC method) | 250         |      |      |      |      |      |                |       |  |
| Maximum Instantaneous Forward Voltage @ 6.0A   | 0.95        |      |      |      |      | V    |                |       |  |
| Maximum DC Reverse Current @ T₄=25°C   |             | 10   |      |      |      |      |                |       |  |
| at Rated DC Blocking Voltage @ T₄=100℃   |             | 400  |      |      |      |      |                |       |  |
| Maximum Full Load Reverse Current, Full Cycle<br>Average .375"(9.5mm) Lead Length @T <sub>A</sub> =75℃   |             | 50   |      |      |      |      |                |       |  |
| Typical Junction Capacitance (Note 1)  |             |      | 100  |      |      |      |                |       |  |
| Typical Thermal Resistance R & JA (Note 2)   | 10          |      |      |      |      |      |                |       |  |
| Operating Temperature Range T <sub>J</sub>   | -65 to +125 |      |      |      |      |      |                |       |  |
| Storage Temperature Range T <sub>STG</sub>   | -65 to +150 |      |      |      |      |      |                | Ĵ     |  |

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

2. Thermal Resistance from Junction to Ambient .375" (9.5mm) Lead Length.

