





TO-220AB

| Primary Characteristics | | | | | | | | | |
|-------------------------|---|--|--|--|--|--|--|--|--|
| 10 | Α | | | | | | | | |
| 20~200 | V | | | | | | | | |
| 150 | Α | | | | | | | | |
| 0.55, 0.75, 0.85, 0.92 | V | | | | | | | | |
| 125, 150 | °C | | | | | | | | |
| | 10 20~200 150 0.55, 0.75, 0.85, 0.92 | | | | | | | | |

Features

- · Guard Ring for Over Voltage Protection
- · High Forward Surge Capability
- · High Frequency Operation

Mechanical Data

· Case: TO-220AB

Case Material : Molded Plastic, UL
Flammability Classification Rating 94V-0

 Terminals : Solder Plated, Solderable per MIL-STD-202, Method 208

• Weight: 2.015 grams (approximate)

| Ordering Information | | | | | | | | |
|----------------------|-----------------|----------------|----------|-----------|--|--|--|--|
| Pa | Part No. Remark | | Package | Packing | | | | |
| SR | 20xxC | RoHS Compliant | TO-220AB | 50 / Tube | | | | |
| SR2 | 0xxC-H | Halogen Free | 10-220AD | 30 / Tube | | | | |

| Maximum Ratings (TA=25°C unless otherwise noted) | | | | | | | | | | | | |
|--|------------------|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|------|
| Parameter | Symbol | SR20 20C | SR20 30C | SR20 40C | SR20 45C | SR20 50C | SR20 60C | SR20 80C | SR20 100C | SR20 150C | SR20 200C | Unit |
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 31.5 | 35 | 42 | 56 | 70 | 105 | 140 | V |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum Average Forward Rectified Current (Total) (Per Leg) | I _F | 20 10 | | | | | | | Α | | | |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load | I _{FSM} | 150 | | | | | | | | Α | | |
| Maximum Instantaneous Forward Voltage IF=10A @ 25°C | V _F | 0.55 0.75 0.85 0.92 | | | | | 92 | ٧ | | | | |
| Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =100°C | I _R | 0.5 30 0.2 10 | | | | | | mA | | | | |
| Typical Junction Capacitance (NOTE1) | CJ | 440 355 245 175 | | | | 140 | pF | | | | | |
| Typical Thermal Resistance | $R_{\theta JC}$ | 3 | | | | | | | | °C/W | | |
| Operating Temperature Range | TJ | -55 to +125 -55 to +150 | | | | | | °C | | | | |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | | °C | | |
| Marking Code | | SR20 20C | SR20 30C | SR20 40C | SR20 45C | SR20 50C | SR20 60C | SR20 80C | SR20 100C | SR20 150C | SR20 200C | |

NOTES:

^{1.}Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

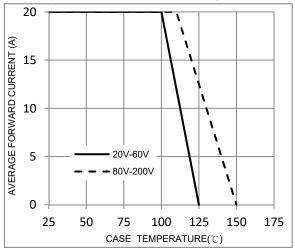


FIG. 3-Maximum Non-Repetitive Forward Surge Current

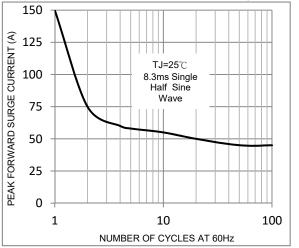


FIG. 5-Typical Junction Capacitance

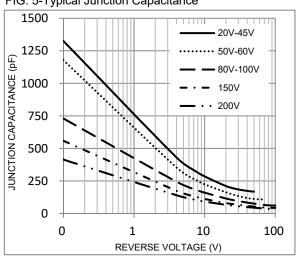


FIG. 2-Typical Forward Characteristics

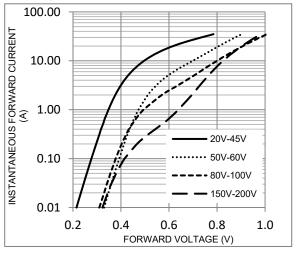
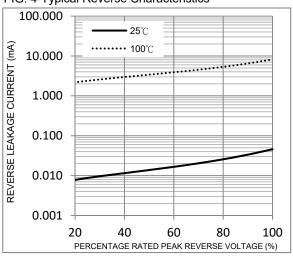


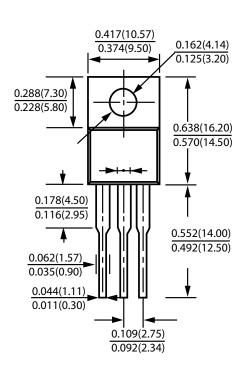
FIG. 4-Typical Reverse Characteristics

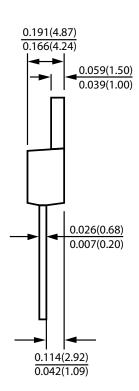






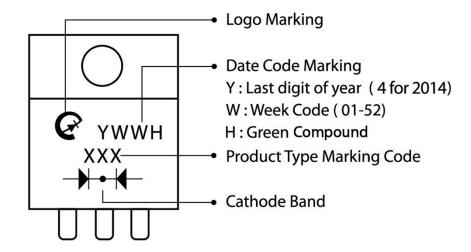
Package Outline Dimensions

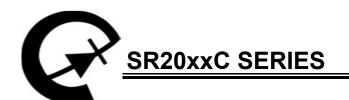




TO-220ABDimensions in inches and (millimeters)

Marking Information







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