

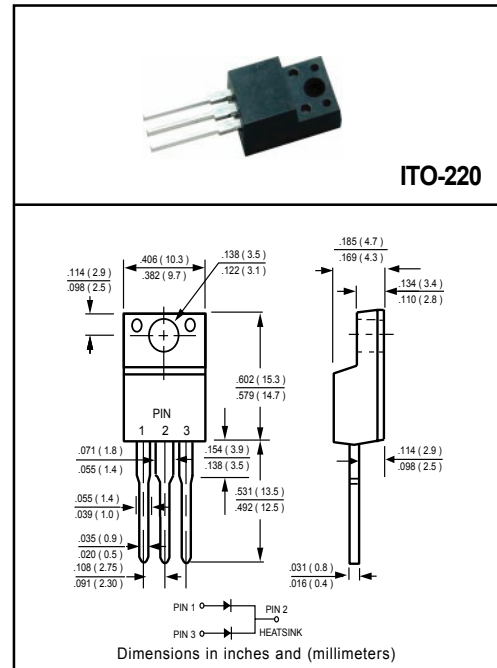
**SCHOTTKY BARRIER RECTIFIER**  
**VOLTAGE 100 Volts CURRENT 20 Amperes**

**FEATURES**

- \* Low switching noise
- \* Low forward voltage drop
- \* Low thermal resistance
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

- \* Case: ITO-220 molded plastic
- \* Epoxy: Device has UL flammability classification 94V-0
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 2.24 grams



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

| RATINGS   | SYMBOL | ISR20100CA   | UNITS |
|---|--------|--------------|-------|
| Maximum Recurrent Peak Reverse Voltage  | VRRM   | 100          | Volts |
| Maximum RMS Voltage   | VRMS   | 70           | Volts |
| Maximum DC Blocking Voltage   | VDC    | 100          | Volts |
| Maximum Average Forward Rectified Current at Derating Case Temperature                            | IO     | 20           | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM   | 150          | Amps  |
| Typical Thermal Resistance (Note 1)   | RθJC   | 3            | °C/W  |
| Typical Junction Capacitance (Note 3)   | CJ     | 500          | pF    |
| Operating Temperature Range   | TJ     | 150          | °C    |
| Storage Temperature Range   | TSTG   | -55 to + 150 | °C    |

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS                                   | SYMBOL | ISR20100CA  | UNITS |
|---|--------|-------------|-------|
| Maximum Instantaneous Forward Voltage at 10.0A DC | VF     | .85         | Volts |
| Maximum Average Reverse Current                   | Ir     | @TA = 25°C  | 1.0   |
| at Rated DC Blocking Voltage                      |        | @TA = 100°C | 100   |

- NOTES : 1. Thermal Resistance: Heat-sink mounted.  
2. Suffix "A" = Common Anode.  
3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
4. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

## RATING AND CHARACTERISTICS CURVES ( ISR20100CA )

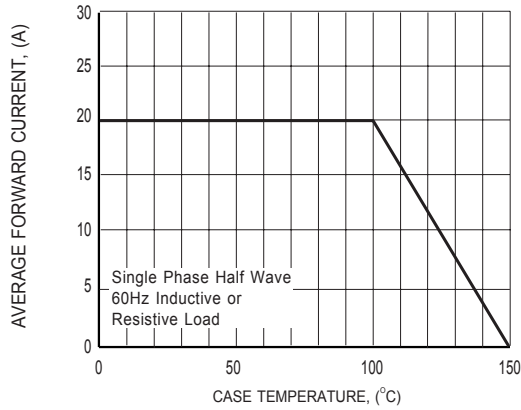


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

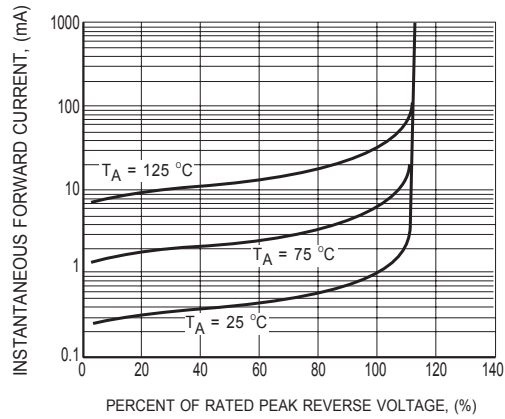


FIG.2 TYPICAL REVERSE CHARACTERISTICS

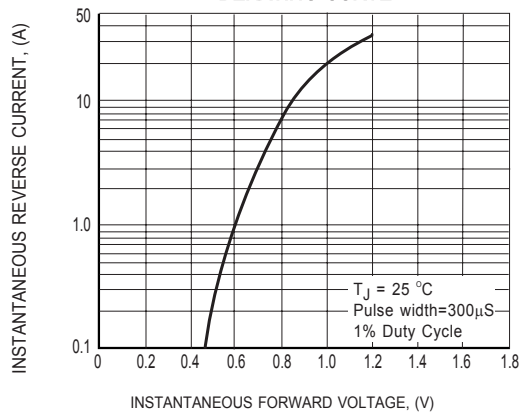


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

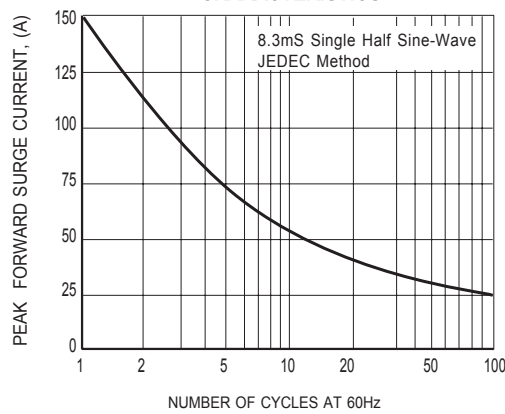


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

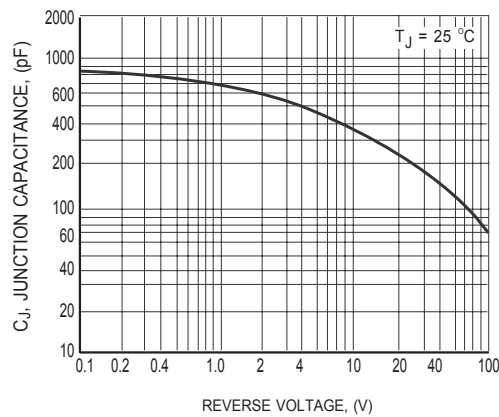


FIG.5 TYPICAL JUNCTION CAPACITANCE

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