

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

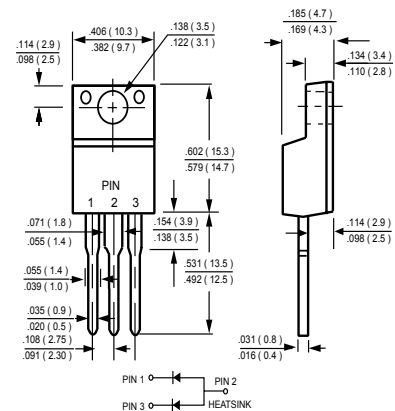
- * Case: ITO-220 molded plastic
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 2.24 grams

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%.



ITO-220



MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	ISR20100A	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum RMS Voltage	V_{RMS}	70	Volts
Maximum DC Blocking Voltage	V_{DC}	100	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I_O	20	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150	Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	3	$^\circ\text{C/W}$
Typical Junction Capacitance (Note 3)	C_J	500	pF
Operating Temperature Range	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to + 150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	ISR20100A	UNITS
Maximum Instantaneous Forward Voltage at 10.0A DC	V_F	.85	Volts
Maximum Average Reverse Current	I_R	1.0	mAmps
at Rated DC Blocking Voltage		100	mAmps

- NOTES : 1. Thermal Resistance: Heat-sink mounted.
2. Suffix "C" = Common Cathode.
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 (ISR20100A)

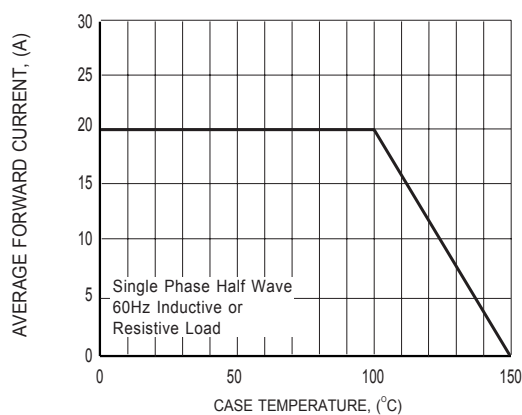


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

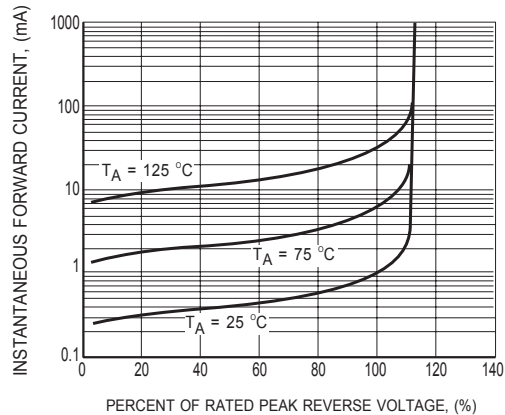


FIG.2 TYPICAL REVERSE CHARACTERISTICS

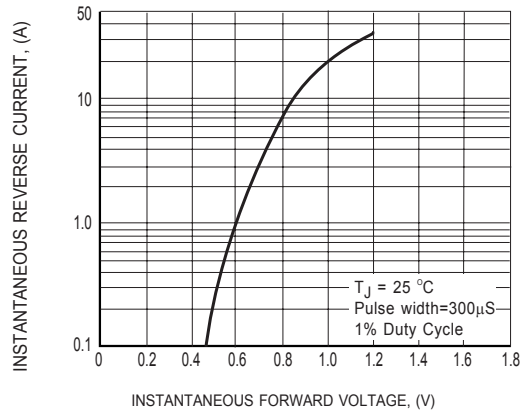


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

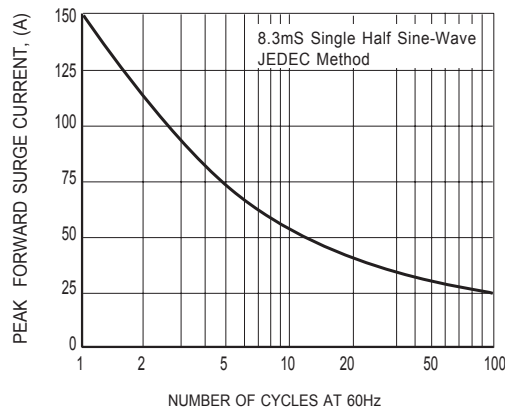


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

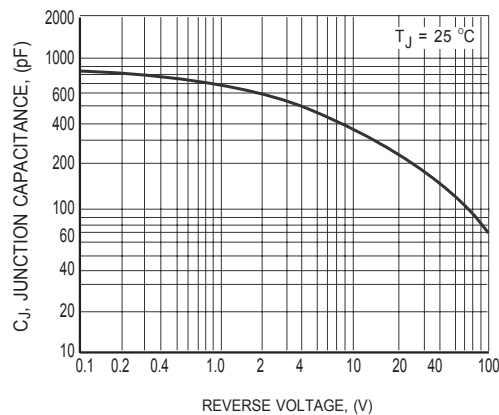


FIG.5 TYPICAL JUNCTION CAPACITANCE

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