

SCHOTTKY BARRIER RECTIFIER
VOLTAGE RANGE 20 to 60 Volts CURRENT 20 Amperes
FEATURES

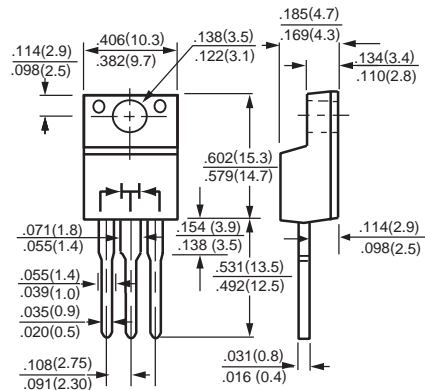
- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High switching capability
- * High surge capability
- * High reliability

MECHANICAL DATA

- * Case: ITO-220 molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * 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


Dimensions in inches and (millimeters)

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

RATINGS		SYMBOL	ISR2020C	ISR2030C	ISR2035C	ISR2040C	ISR2045C	ISR2050C	ISR2060C	UNITS	
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	20	30	35	40	45	50	60	Volts	
Maximum RMS Voltage		V _{RMS}	14	21	25	28	32	35	42	Volts	
Maximum DC Blocking Voltage		V _{DC}	20	30	35	40	45	50	60	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 _{θJC}	3								°C/W
Typical Junction Capacitance (Note 3)		C _J	700						500		pF
Operating Temperature Range		T _J	-55 to + 150								°C
Storage Temperature Range		T _{STG}	-55 to + 150								°C

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

CHARACTERISTICS		SYMBOL	ISR2020C	ISR2030C	ISR2035C	ISR2040C	ISR2045C	ISR2050C	ISR2060C	UNITS	
Maximum Instantaneous Forward Voltage at 10.0A DC		V _F	.65						.75		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ T _C = 25°C	I _R	10								mAmps
	@ T _C = 100°C		100								mAmps

- NOTES : 1. Thermal Resistance Junction to Case.
2. Suffix "A" = Common Anode.
3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (ISR2020C THRU ISR2060C)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

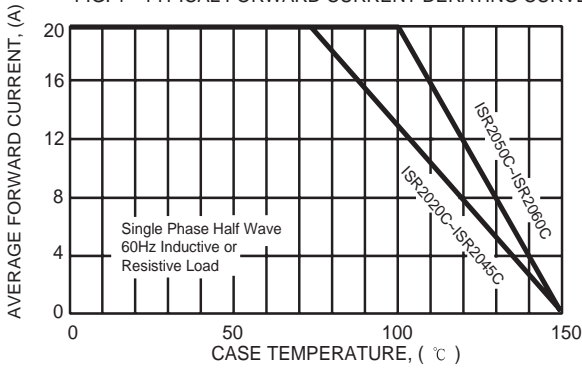


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

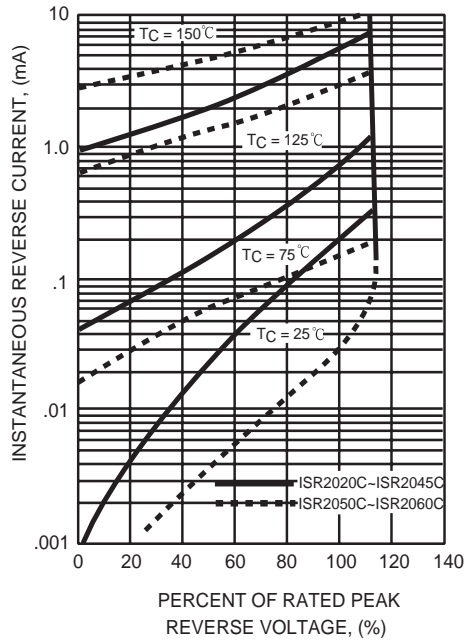


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

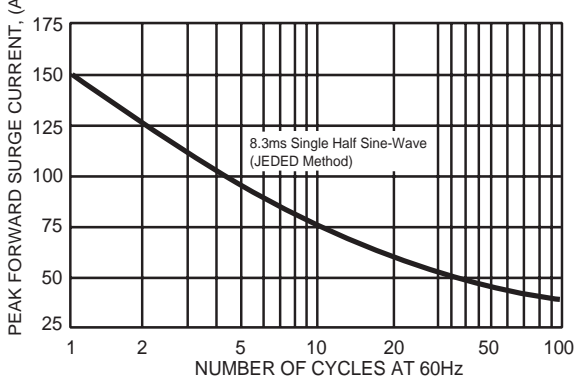


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

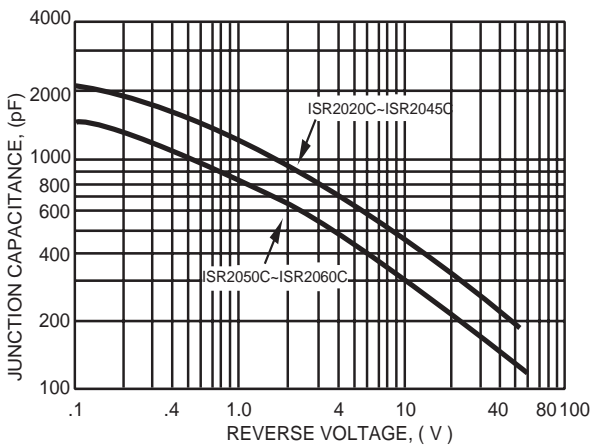


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

