

ISR1620C THRU ISR1660C

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 60 Volts CURRENT 16 Amperes

FEATURES

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

MECHANICAL DATA

* Case: ITo-220 molded plastic

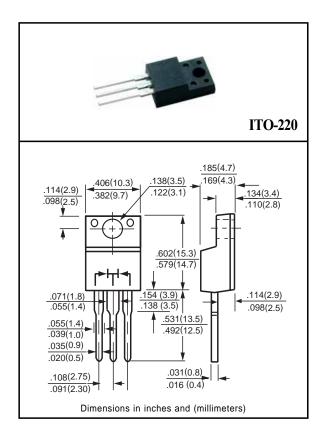
* Epoxy: Device has UL flammability classification 94V-O

* 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%.



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

RATINGS	SYMBOL	ISR1620C	ISR1630C	ISR1635C	ISR1640C	ISR1645C	ISR1650C	ISR1660C	UNITS
Maximum Recurrent Peak Reverse Voltage	Vrrm	20	30	35	40	45	50	60	Volts
Maximum RMS Voltage	VRMS	14	21	25	28	32	35	42	Volts
Maximum DC Blocking Voltage	VDC	20	30	35	40	45	50	60	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	lo	16							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	700 500					00	pF	
Operating Temperature Range	TJ	-55 to + 150						٥C	
Storage Temperature Range	Тѕтс	-55 to + 150							٥C

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

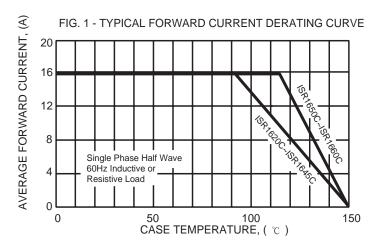
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CHARACTERISTICS		SYMBOL	ISR1620C	ISR1630C	ISR1635C	ISR1640C	ISR1645C	ISR1650C	ISR1660C	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC		VF	.65				.7	75	Volts	
Maximum Average Reverse Current	@Tc = 25°C	- IR	10						mAmps	
at Rated DC Blocking Voltage	@Tc = 100°C		100							mAmps

NOTES: 1. Thermal Resistance Junction to Case.

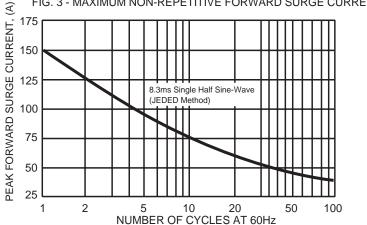
- 2. Suffix "A" = Common Anode.
- 3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2002-11

RATING AND CHARACTERISTIC CURVES (ISR1620C THRU ISR1660C)







10 INSTANTANEOUS REVERSE CURRENT, (mA) 1.0 .1 .01 ISR1620C~ISR1645C ISR1650C~ISR1660C .001 20 60 100 120 140 PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

FIG. 4 - TYPICAL JUNCTION CAPACITANCE

