

SCHOTTKY BARRIER RECTIFIER

SR1020FCT THRU SR10200FCT 20 to 200 V 10A

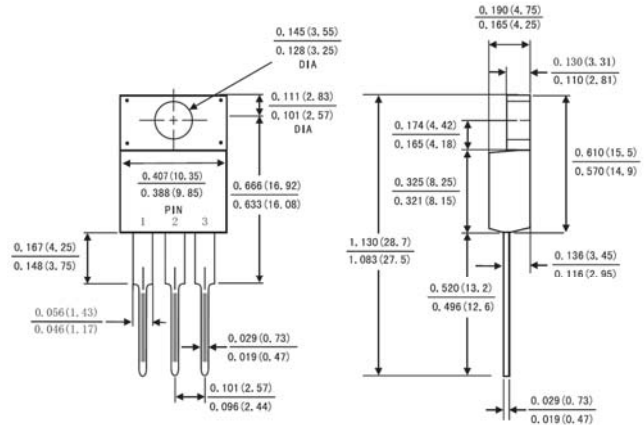
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for over voltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed:250 °C/10 seconds, 0.25"(6.35mm)from case

Mechanical Data

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solder able per MIL-STD-750,method 2026
- Polarity: As marked. No suffix indicates Common Cathode, suffix "A" indicates Common Anode
- Mounting Position: Any
- Weight: 0.08ounce,2.24 grams

ITO-220AB



Maximum Ratings and Electrical Characteristics

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

	Symbols	SR 1020 FCT	SR 1030 FCT	SR 1040 FCT	SR 1050 FCT	SR 1060 FCT	SR 1080 FCT	SR 10100 FCT	SR 10150 FCT	SR 10200 FCT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	57	71	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current see Fig.1	$I_{(AV)}$	10.0									Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150									Amp
Maximum instantaneous forward voltage at 5.0 A(Note 1)	V_F	0.60		0.75		0.85		0.90		0.95	Volts
Maximum Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	I_R	0.5									mA
		15			50						
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.5									°C/W
Operating Temperature Range	T_J	-65 to +125									°C
Storage Temperature Range	T_{STG}	-65 to +150									

NOTES:

1. Pulse test: 300 μ s pulse width, 1% duty cycle
2. Thermal resistance from junction to case

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RATINGS AND CHARACTERISTIC CURVES (SR1020FCT THRU SR10200FCT)

FIG.1-FORWARD CURRENT DERATING CURVE

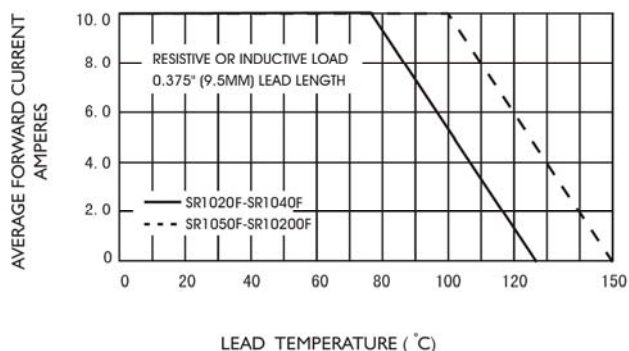


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

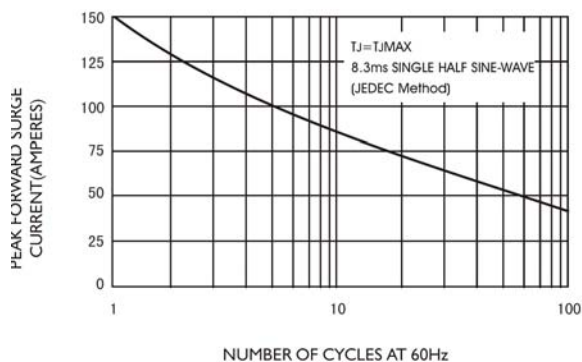


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

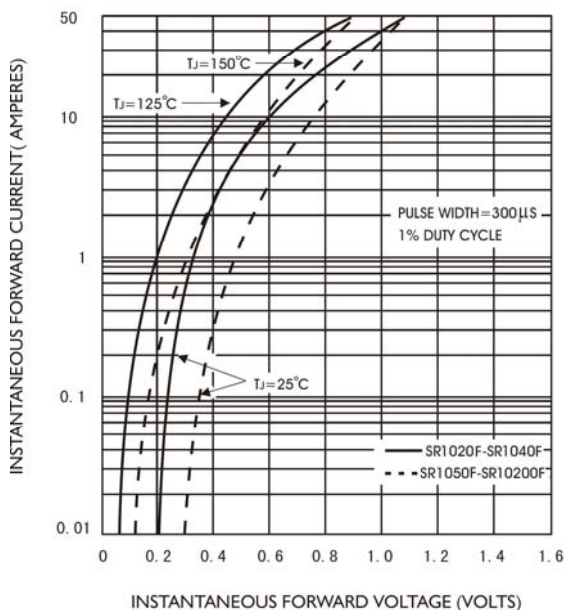


FIG.4-TYPICAL REVERSE CHARACTERISTICS

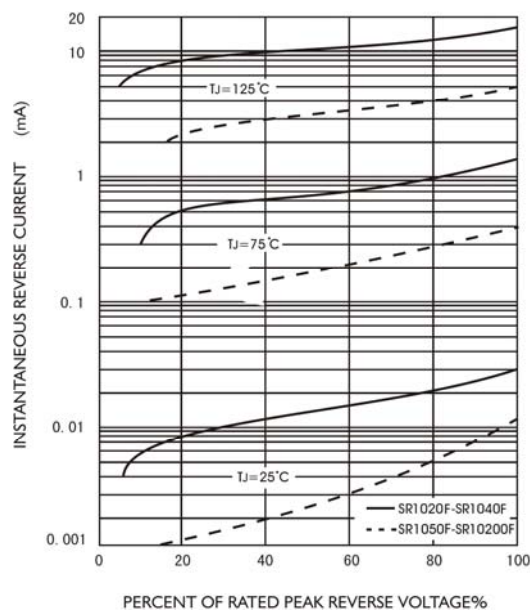


FIG.5-TYPICAL JUNCTION CAPACITANCE

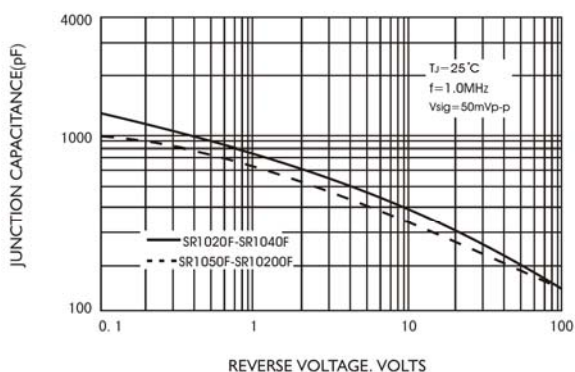


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

