

CE

CHENYI ELECTRONICS

SR1020 THRU SR10A0

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts

Forward Current - 10.0Amperes

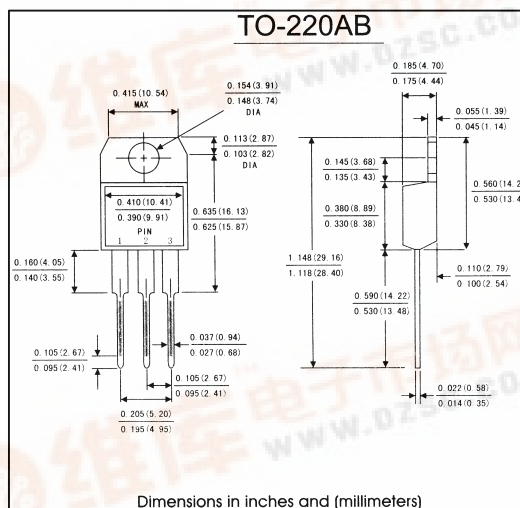
FEATURES

- . Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- . Metal silicon junction ,majority carrier conduction
- . Guard ring for overvoltage 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 DO-220AB molded plastic body
- . **Terminals:** lead solderable per MIL-STD-750,method 2026
- . **Polarity:** As marked. No suffix indicates Common Cathode, suffix"A" indicates Common Anode
- . **Mounting Position:** Any
- . **Weight:** 0.08 ounce, 2.24 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		Symbols	SR1020	SR1030	SR1040	SR1050	SR1060	SR1080	SR10A0	Units
Maximum repetitive peak reverse voltage		V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage		V _{RMS}	14	21	28	35	42	57	71	Volts
Maximum DC blocking voltage		V _{DC}	20	30	40	50	60	80	100	Volts
Macimum average forward rectified current(see Fig.1)		I _(AV)	10.0							Amps
Repetitive peak forward current(square wavr, 20KHz) at Tc=105℃		I _{FRM}	20.0							Amps
Peak forward surge current 8.3ms singel half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	150.0							Amps
Maximum instantaneous forward voltage at 10 A(Note 1)		V _F	0.70			0.8		0.80	0.85	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA=25℃	I _R	1.0							mA
	TA=125℃		30			25				
Typeical thermal resistance(Note 2)		R θ _{JC}	2.5							℃/W
Operating junction temperature range		T _J	-65 to +125			-65 to +150				℃
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 SR1020 THRU SR10A0

FIG.1-FORWARD CURRENT DERATING CURVE

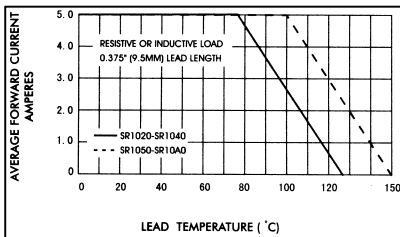


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

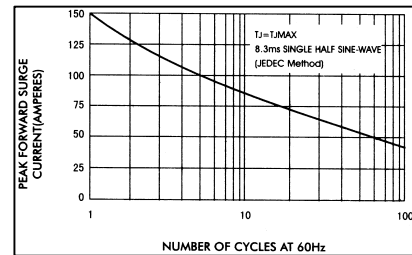


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

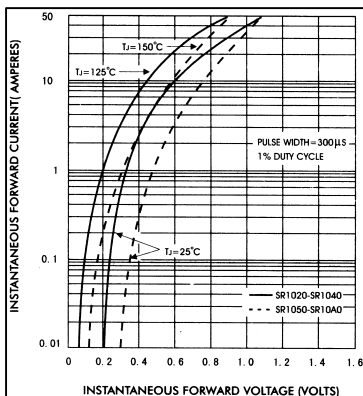


FIG.4-TYPICAL REVERSE CHARACTERISTICS

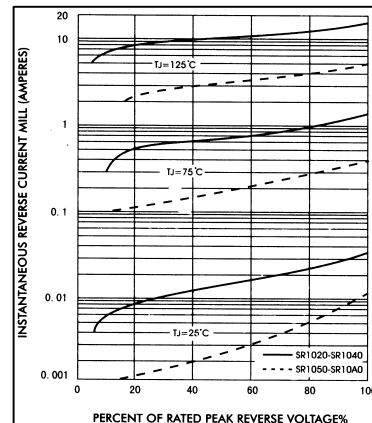


FIG.5-TYPICAL JUNCTION CAPACITANCE

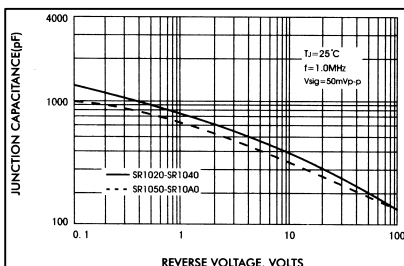


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

