



CHENYI ELECTRONICS

SR1620 THRU SR16A0

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts

Forward Current - 16.0Amperes

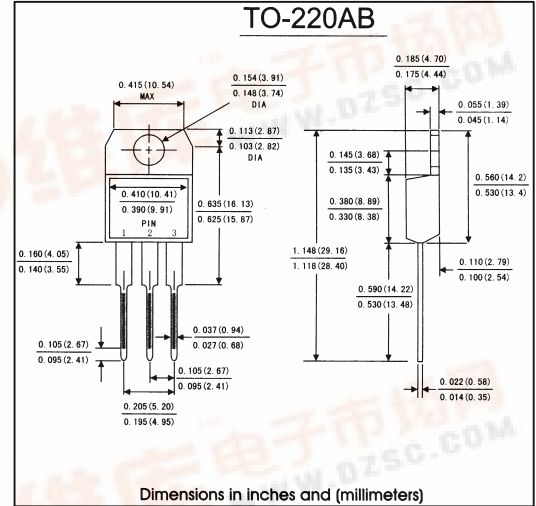
FEATURES

- 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	SR1620	SR1630	SR1640	SR1650	SR1660	SR1680	SR16A0	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	
Maximum average forward rectified current(see Fig.1)	$I_{(AV)}$	16.0							Amps	
Repetitive peak forward current(square wavr, 20KHz) at $T_c=105^\circ C$	I_{FRM}	32.0							Amps	
Peak forward surge current 8.3ms single 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	0.65			0.75		0.80	0.85	Volts	
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I_R	1.0							mA	
		30			50					
Typeical thermal resistance(Note 2)	$R \theta_{JC}$	3.0							$^\circ C/W$	
Operating junction temperature range	T_J	-65 to +125				-65 to +150				$^\circ C$
Storage temperature range	T_{STG}	-65 to +150							$^\circ C$	

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

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RATINGS AND CHARACTERISTIC CURVES SR1620 THRU SR16A0

FLG.1-FORWARD CURRENT DERATING CURVE

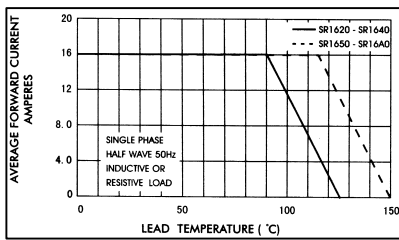


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

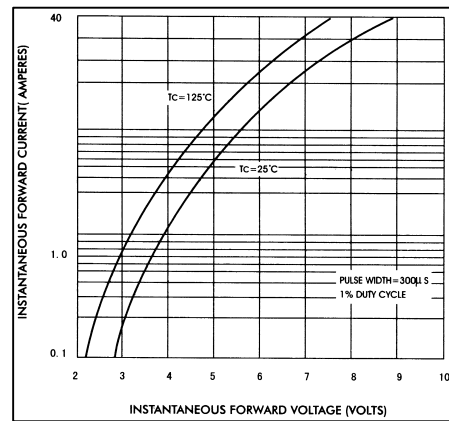


FIG.4-TYPICAL JUNCTION CAPACITANCE

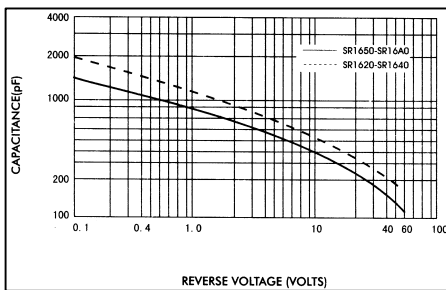


FIG.3-TYPICAL REVERSE CHARACTERISTICS

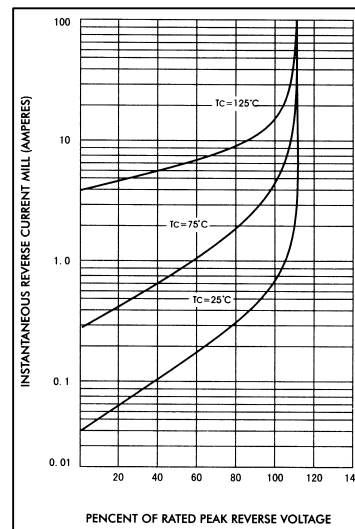


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

