# **CE** CHENYI ELECTRONICS

# SR1535 THRU SR1560

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 35 to 60 Volts

Forward Current - 15Amperes

## **FEATURES**

- . Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- . Metal sliicon junction ,majority carriet conduction
- . Guard ring for overcoltage 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 polarilty 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

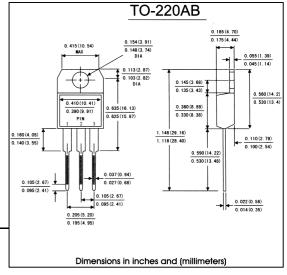
(Ratings at 25°C ambient temperature unless otherwise specified, Single phase, half wave, resistive or inductive)

load. For capacitive load, derate by 20%)

	Symbols	SR1535	SR1545	SR1550	SR1560	Units
Maximum repetitive peak reverse voltage	Vrrm	35	45	50	60	Volts
Maximum RMS voltage	Vrms	25	32	35	42	Volts
Maximum DC blocking voltage	VDC	35	45	50	60	Volts
Macimum average forward rectified current(see Fig.1)	I(AV)	7.5 15.0				Amps
Repetitive peak forward current(square wavr, 20KHz) at Tc=105℃	Ifrm	15.0				Amps
Peak forward surge current 8.3ms singel half sine-wave superimposed on rated load (JEDEC method)	IFSM	150.0				Amps
Maximum instantaneous forward voltage at 10 A(Note 1)	VF	0.65 0.75		Volts		
Maximum instantaneous reverse $TA=25^{\circ}C$ current at rated DC blocking voltage(Note 1) $TA=125^{\circ}C$	IR	1.0 15 50		mA		
Typeical thermal resistance(Note 2)	Rθ <sub>JC</sub>	2.5			°C/W	
Operating junction temperature range	TJ	-65 to +150			°C	
storage temperature range	Tstg	-65 to +175			°C	

**Notes:** 1. Pulse test:  $300 \,\mu$  s pulse width, 1% duty cycle

2. Thermal resistance from juntion to case





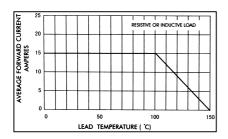
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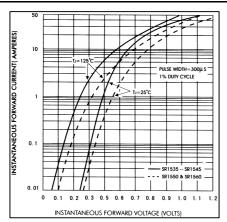
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## **RATINGS AND CHARACTERISTIC CURVES SR1535 THRU SR1560**

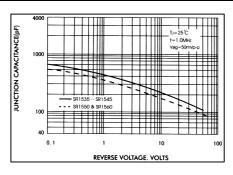
### FLG.1-FORWARD CURRENT DERATING CURVE



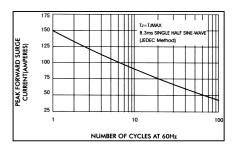
## FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



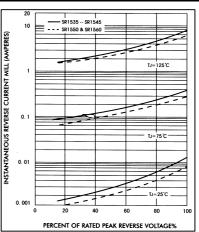
#### FIG.5-TYPICAL JUNCTION CAPACITANCE



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



#### FIG.4-TYPICAL REVERSE CHARACTERISTICS



#### FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

