

SRF1535 THRU SRF1560

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

0.185 (4.70) 0.145 (3.85) 0.160 (4.05) 0.105 (2.67) 0.005 (2.41) 0.105 (2.67) 0.005 (2.41) 0.105 (2.67)

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)	lғsм	150.0				Amps	
Maximum instantaneous forward voltage at 10 A(Note 1)	VF	0.	0.65 0.75		Volts		
Maximum instantaneous reverse TA=25℃	lr.	1.0			mA		
current at rated DC blocking voltage(Note 1) TA=125℃		1	5	5	50	\	
Typeical thermal resistance(Note 2)	RθJc	2.5			°C/W		
Operating junction temperature range	TJ	-65 to +150			$^{\circ}\!\mathbb{C}$		
storage temperature range	Tstg	-65 to +175			$^{\circ}$		

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

2. Thermal resistance from juntion to case



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RATINGS AND CHARACTERISTIC CURVES SRF1535 THRU SRF1560

FLG.1-FORWARD CURRENT DERATING CURVE

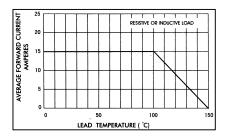


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

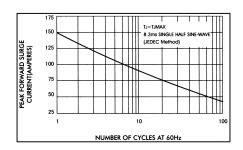


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

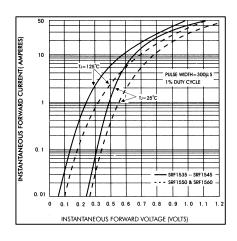


FIG.4-TYPICAL REVERSE CHARACTERISTICS

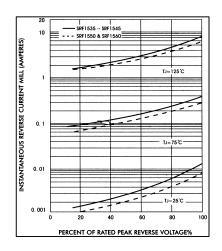


FIG.5-TYPICAL JUNCTION CAPACITANCE

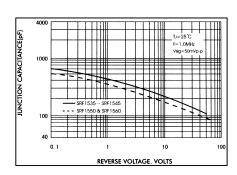


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

