



SEMICONDUCTOR

# SRF1535 THRU SRF15200

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 35 to 200 Volts

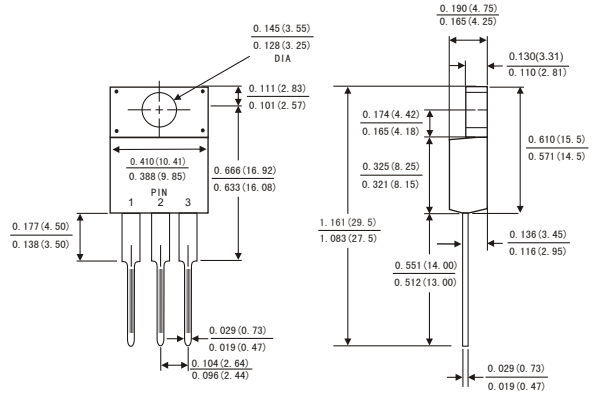
Forward Current - 15Amperes

### 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:260° C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



### ITO-220AB



### MECHANICAL DATA

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.08ounce, 2.24 gram

Dimensions in inches and (millimeters)

### 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	SRF 1535	SRF 1545	SRF 1550	SRF 1560	SRF 15A0	SRF 15150	SRF 15200	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	35	45	50	60	100	150	200	Volts
Maximum RMS voltage	V <sub>RMS</sub>	25	32	35	42	70	105	140	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	35	45	50	60	100	150	200	Volts
Maximum average forward rectified current See Fig. 1	I(AV)	15.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150.0							Amps
Maximum instantaneous forward voltage at 15 A	V <sub>F</sub>	0.60		0.75		0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I <sub>R</sub>	0.5							mA
		30			50				
Typical thermal resistance (Note 2)	R <sub>θJC</sub>	3.0							°C/W
Operating junction temperature range	T <sub>J</sub>	-65 to +125			-65 to +150				°C
Storage temperature range	T <sub>STG</sub>	-65 to +150							°C

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Thermal resistance from junction to case

# RATINGS AND CHARACTERISTIC CURVES SRF1535 THRU SRF15200

FIG.1-FORWARD CURRENT DERATING CURVE

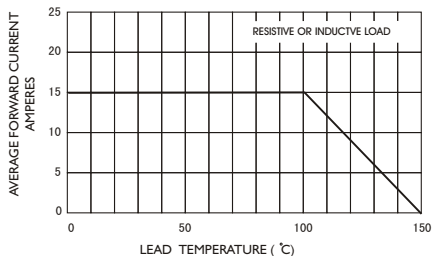


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

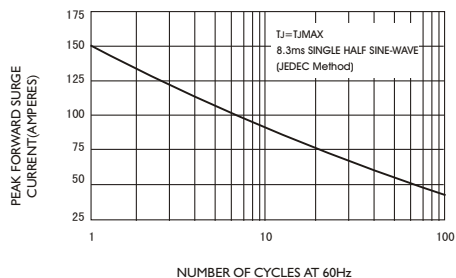


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

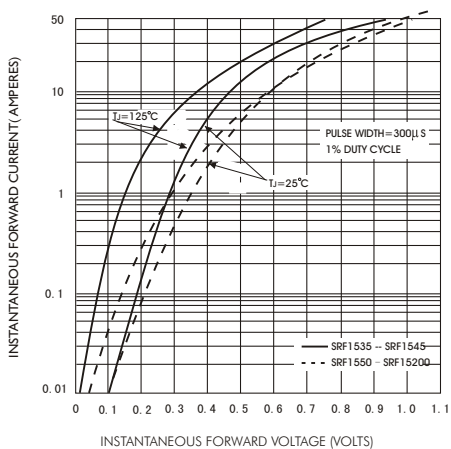


FIG.4-TYPICAL REVERSE CHARACTERISTICS

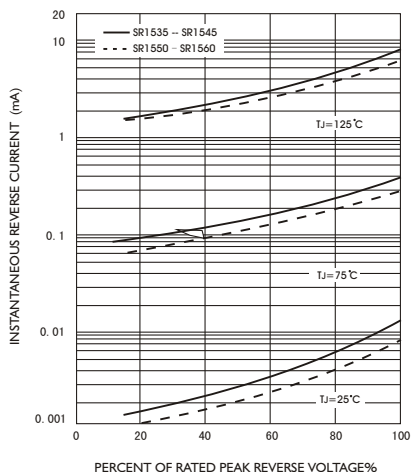


FIG.5-TYPICAL JUNCTION CAPACITANCE

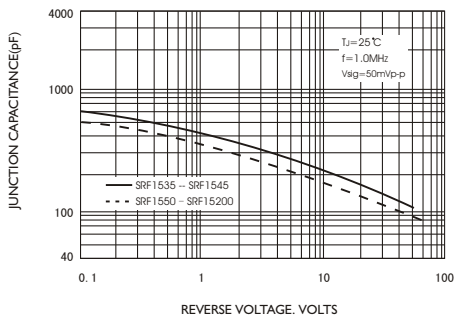


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

