星合电子
XINGHE ELECTRONICS

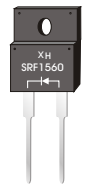
SRF1535 THRU SRF15200(SINGLE CHIP)

SCHOTTKY BARRIER RECTIFIER

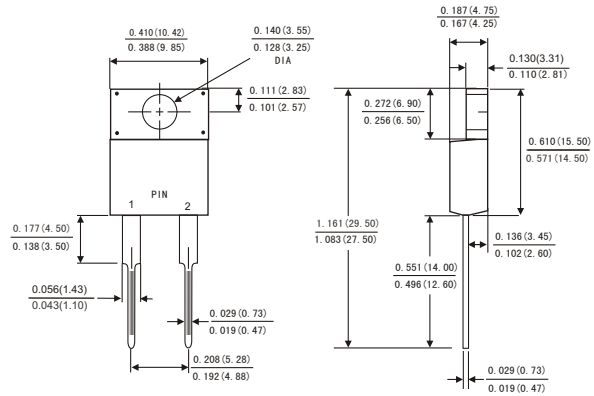
Reverse Voltage - 35 to 200 Volts
Forward Current - 15Amperes

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-220AC



Dimensions in inches and (millimeters)

MECHANICAL DATA

- `~±£: JEDEC ITO-220AC molded plastic body
- qE°«§¬~ª±: Lead solderable per MIL-STD-750,method 2026
- m-ª~°§²·: As marked.
- j -³¬2§¬¥¢m-±§2§-¬: Any
- t £§¥¦²: 0.08ounce, 2.24 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25℃ 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 15100	SRF 15150	SRF 15200	Units
Maximum repetitive peak reverse voltage	V_{RRM}	35	45	50	60	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	25	32	35	42	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	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_{FSM}	150.0							Amps
Maximum instantaneous forward voltage at 15 A	V_F	0.60		0.75		0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) T_c=25℃	I_R	0.2							mA
T_c=125℃		30			50				
Typical thermal resistance (Note 2)	$R_{\theta JC}$	3.0							℃/W
Operating junction temperature range	T_J	-65 to+150							℃
Storage temperature range	T_{STG}	-65 to+150							℃

k -²£±: 1.Pulse test: 300 μ s pulse width,1% duty cycle
2.Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

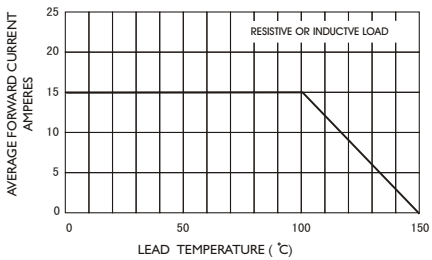


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

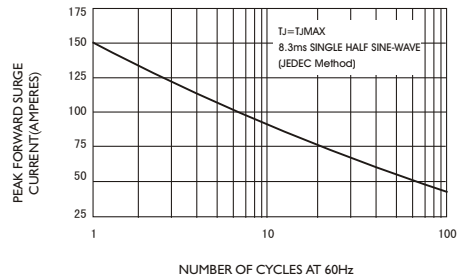


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

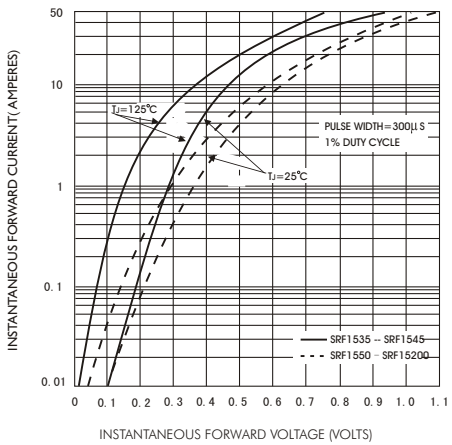


FIG.4-TYPICAL REVERSE CHARACTERISTICS

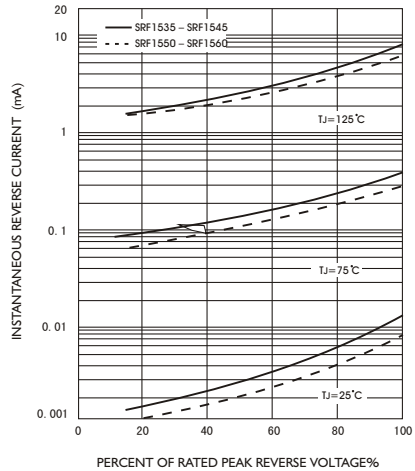


FIG.5-TYPICAL JUNCTION CAPACITANCE

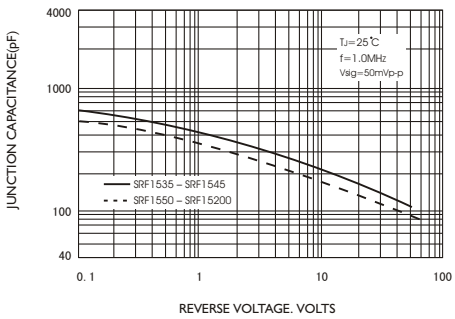


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE