

SR5150-SR5200

5.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Epitaxial construction

MECHANICAL DATA

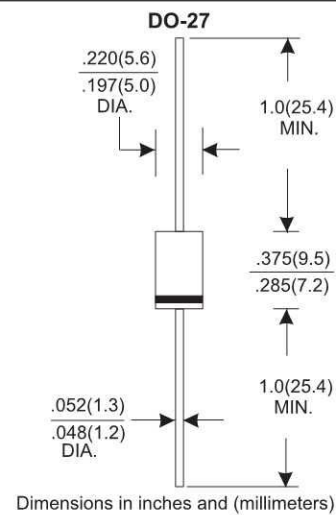
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.10 grams
- * Both normal and Pb free product are available:
- * Normal: 80~95%Sn, 5~20%Pb
- * Pb free: 99 Sn above can meet Rohs environment substance directive request

VOLTAGE RANGE

150 to 200 Volts

CURRENT

5.0 Amperes



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25℃ unless otherwise noted)				
PARAMETER	SYMBOL	SR 5150	SR 5200	UNIT
Maximum repetitive peak reverse voltage		150	200	V
Maximum RMS voltage		105	140	V
Maximum DC blocking voltage		150	200	V
Maximum average forward rectified current	I _{F(AV)}	5		A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	120		A
Maximum instantaneous forward voltage (Note 1) @ 5 A	V	1.05		V
Maximum reverse current @ rated V _R T _A =25 ℃ T _A =125 ℃	I _R	0.1		mA
		1		
Voltage rate of change (Rated V _R)	dV/dt	10000		V/μs
Typical thermal resistance	R _{θJC}	6		℃/W
	R _{θJA}	35		
Operating junction temperature range	T _J	- 55 to +150		℃
Storage temperature range	T _{STG}	- 55 to +150		℃

Note 1: Pulse test with PW=300 μ

RATING AND CHARACTERISTIC CURVES SR5150—SR5200

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

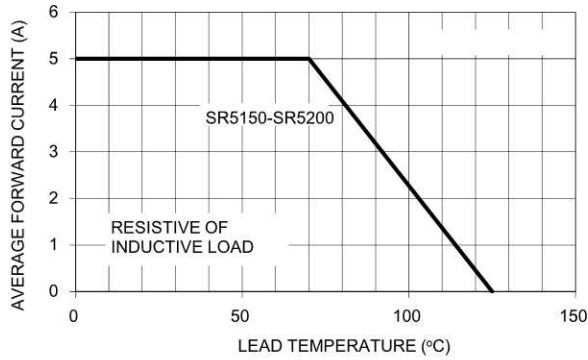


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

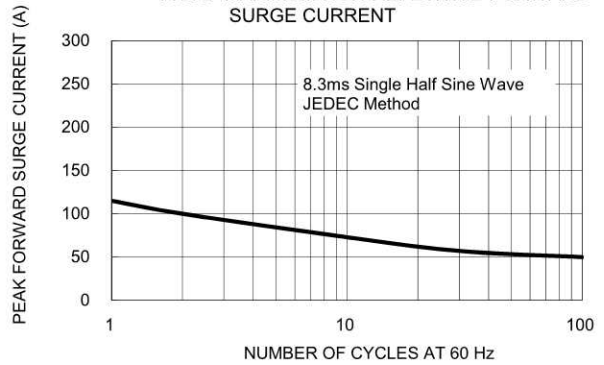


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

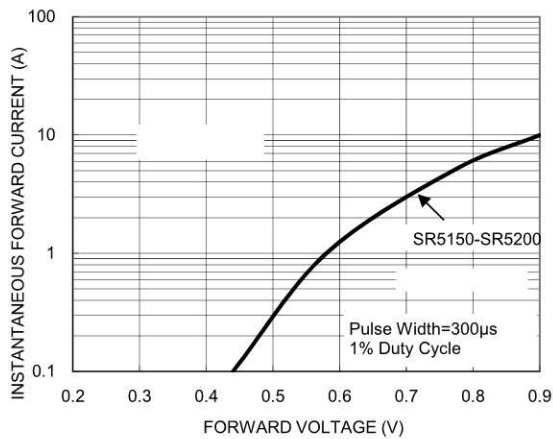


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

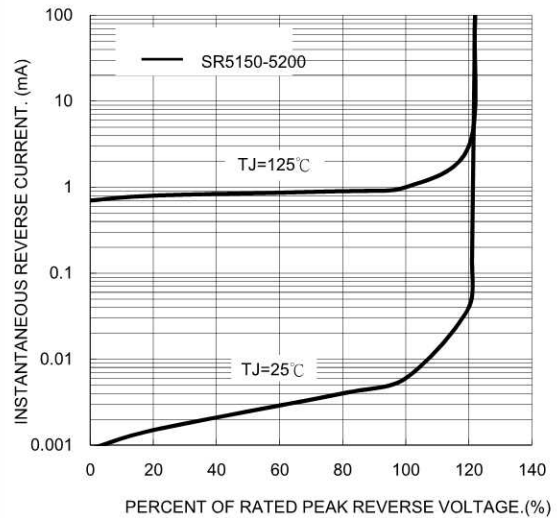


FIG. 5- TYPICAL JUNCTION CAPACITANCE

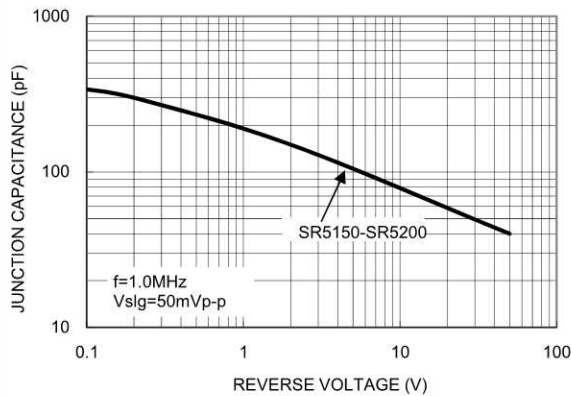


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

