

SR220 - SR2100

2.0 AMPS. Schottky Barrier Rectifiers

DO-15



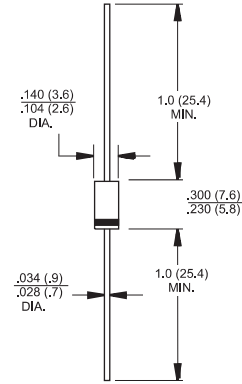
SM Technology Co., Limited

Features

- ✧ Low power loss, high efficiency.
- ✧ High current capability, Low VF.
- ✧ High reliability
- ✧ High surge current capability.
- ✧ Epitaxial construction.
- ✧ Guard-ring for transient protection.
- ✧ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application

Mechanical Data

- ✧ Cases: DO-15 molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 0.4 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SR 220	SR 230	SR 240	SR 250	SR 260	SR 280	SR 2100	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	I _(AV)	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50							A
Maximum Instantaneous Forward Voltage@2.0 A	V _F	0.55			0.70		0.85		V
Maximum D.C. Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =125°C	I _R	0.5					0.1		mA
		10			5.0		2.0		mA
Typical Junction Capacitance (Note 2)	C _j	120			85		65		pF
Typical Thermal Resistance (Note 1)	R _{θJA}	75							°C/W
Operating Junction Temperature Range	T _J	-65 to +150							°C
Storage Temperature Range	T _{STG}	-65 to +150							°C

Notes: 1. Mount on Cu-Pad Size 10mm x 10mm on P.C.B.

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SR220THURSR2100)

FIG.1- FORWARD CURRENT DERATING CURVE

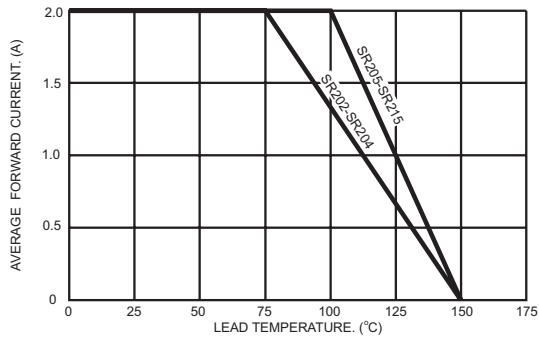


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

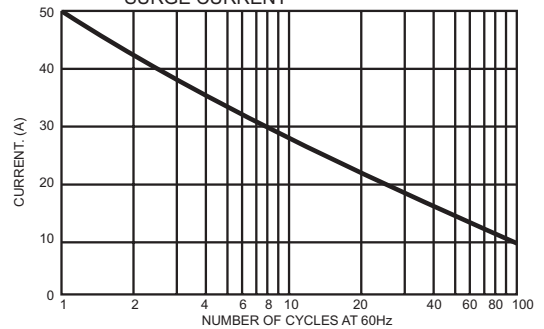


FIG.3- TYPICAL FORWARD CHARACTERISTICS

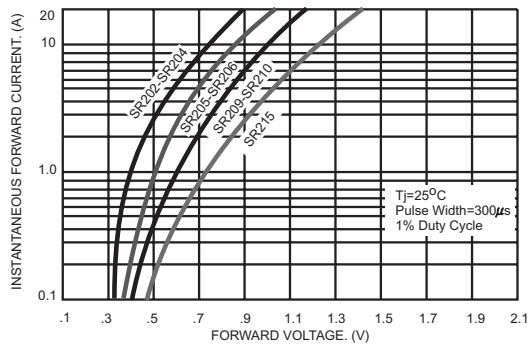


FIG.4- TYPICAL REVERSE CHARACTERISTICS

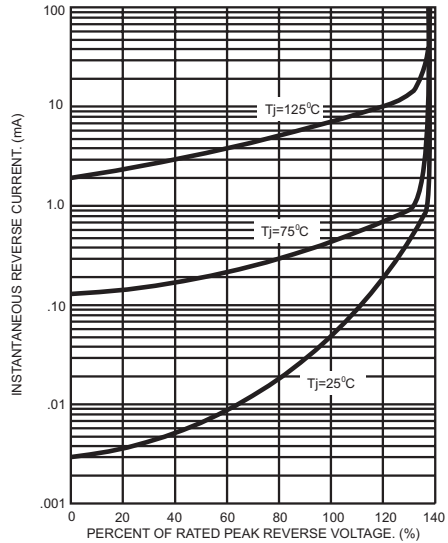


FIG.5- TYPICAL JUNCTION CAPACITANCE

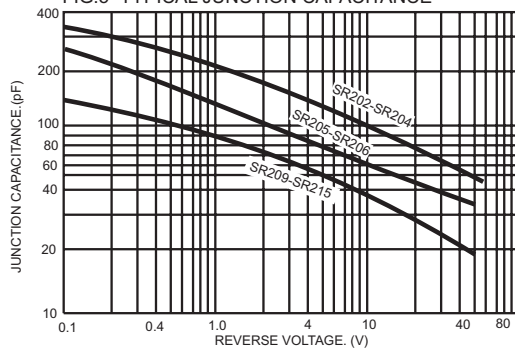


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

