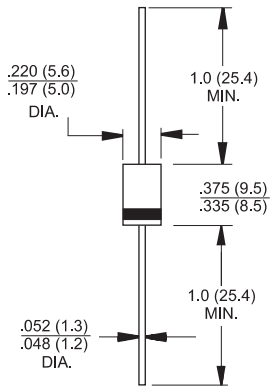
SR520-SR5200

5.0 AMP. Schottky Barrier Rectifiers

DO - 27



Dimensions in inches and (millimeters)

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 inventor, free wheeling, and polarity protection application

Mechanical Data

- ✧ Cases: DO- 27,Molded plastic
- ✧ 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: 1.2 grams

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 520	SR 530	SR 540	SR 550	SR 560	SR 580	SR 5100	SR 5150	SR 5200	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	141	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	5.0									A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150									A
Maximum Instantaneous Forward Voltage @5.0A	V_F	0.45	0.55		0.70		0.85				V
Maximum D.C. Reverse Current @ T_A=25 °C	I_R	0.5					0.1				mA
at Rated DC Blocking Voltage @ T_A=125 °C		15			10		5.0		1.0		mA
Typical Junction Capacitance (Note 2)	Cj	250			210		120				pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JC}$	35 2					10 2				°C/W
Operating Junction Temperature Range	T_J	-55 to +150					- 55 ---- + 175				°C
Storage Temperature Range	T_{STG}	-55 to +150					- 55 ---- + 175				°C

Notes: 1. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

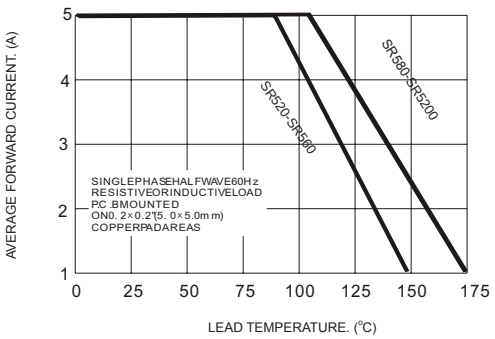


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

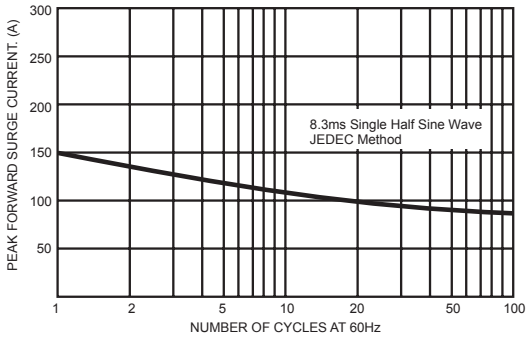


FIG.3- TYPICAL FORWARD CHARACTERISTICS

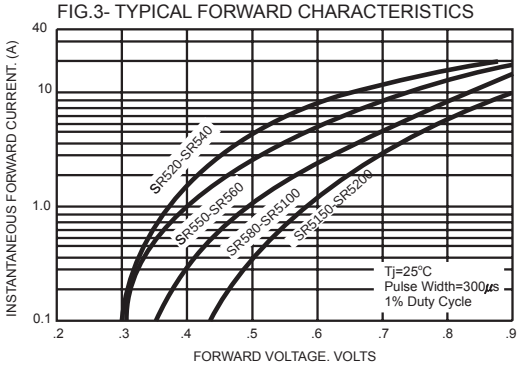


FIG.4- TYPICAL REVERSE CHARACTERISTICS

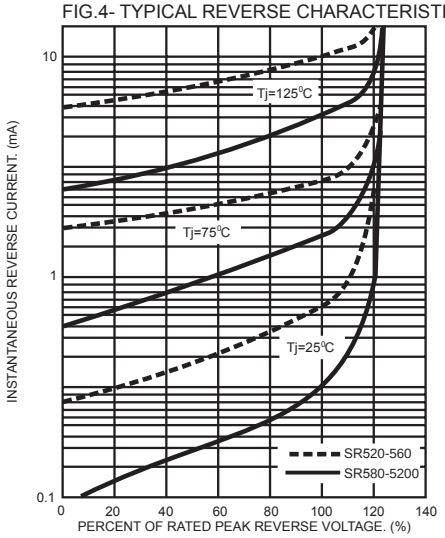


FIG.5- TYPICAL JUNCTION CAPACITANCE

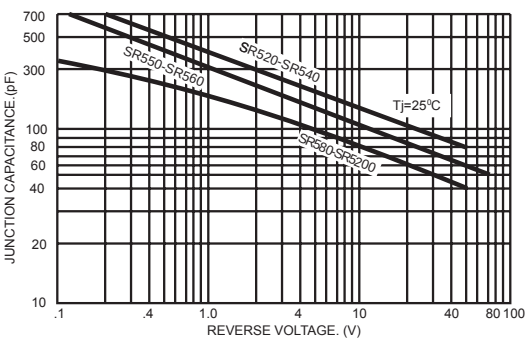
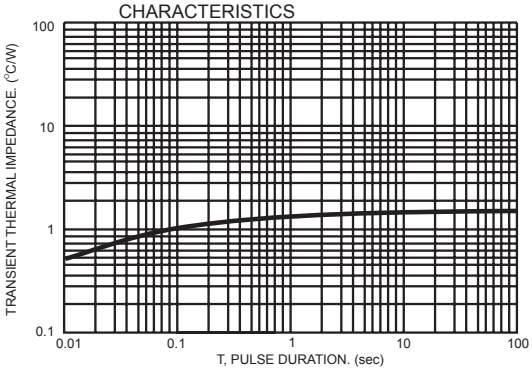


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-27	1250/AMMO	12500	40X26.5X30	14.00	12.00