Zibo Seno Electronic Engineering Co., Ltd.

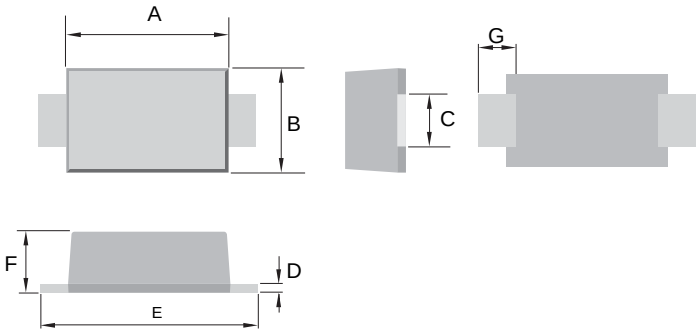
淄博圣诺

SR52BF – SR520BF

5.0A SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 150A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

- Case: SMBF, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.057 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version**

SMBF		
Dim	**Min**	**Max**
A	4.20	4.40
B	3.50	3.70
C	1.90	2.20
D	0.18	0.26
E	5.10	5.50
F	1.10	1.30
G	1.00	-
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	SR52BF	SR53BF	SR54BF	R55BF	SR56BF	SR58BF	SR510BF	SR515BF	SR520BF	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	80	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	105	140	V
Average Rectified Output Current @T_L = 75°C	I_O	5.0									A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150									A
Forward Voltage @I_F = 5.0A	V_{FM}	0.70			0.70		0.80		0.90		V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	0.1 20									mA
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$ $R_{\theta JA}$	28 88									°C/W
Typical Junction Capacitance	C_j	800					500				pF
Operating Temperature Range	T_j	-55 to +150									°C
Storage Temperature Range	T_{STG}	-55 to +150									°C

Note: 1. Mounted on P.C. Board with 5.0mm^2 copper pad area.

Download from alldatasheet.com

SR52BF – SR520BF

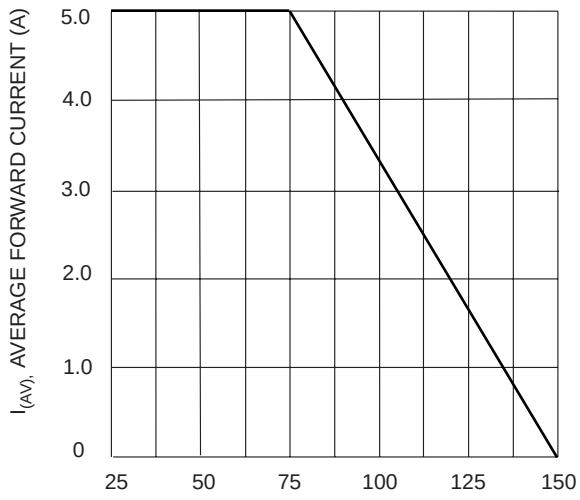


Fig. 1 Forward Current Derating Curve

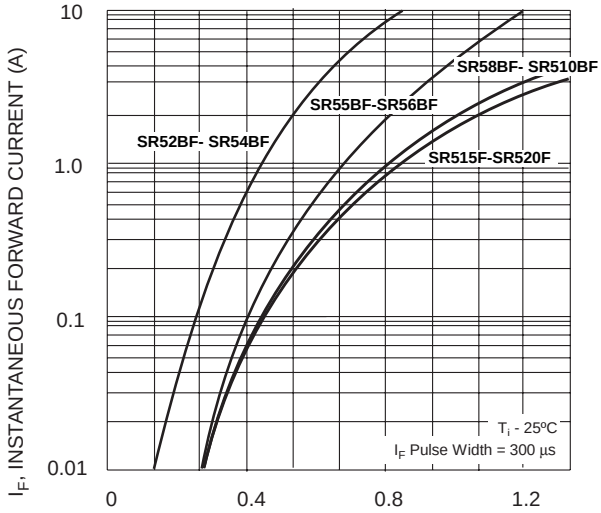


Fig. 2 Typ. Forward Characteristics

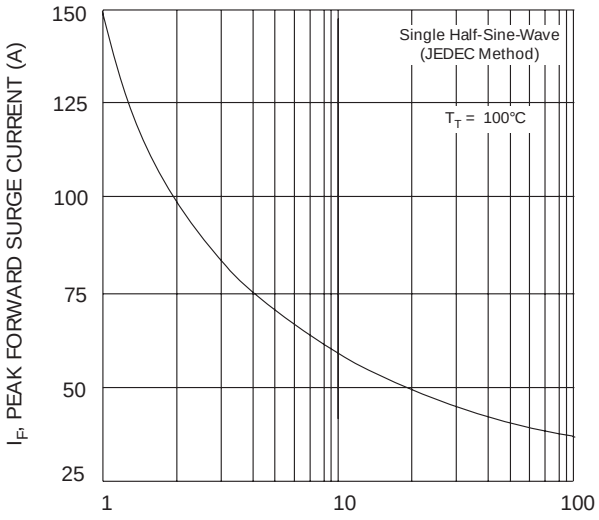


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

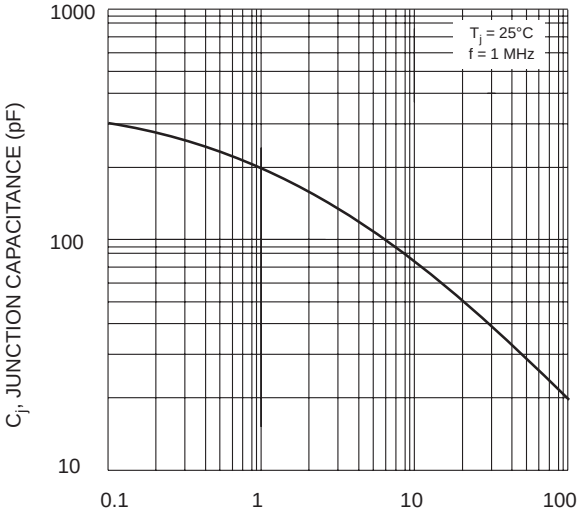


Fig. 4 Typical Junction Capacitance

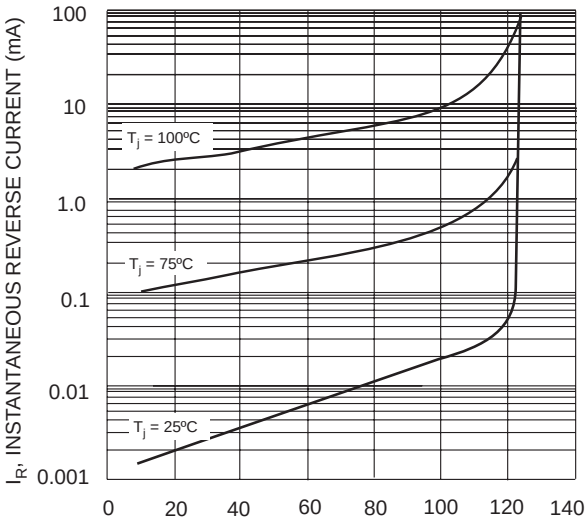


Fig. 5 Typical Reverse Characteristics

Download from alldatasheet.com