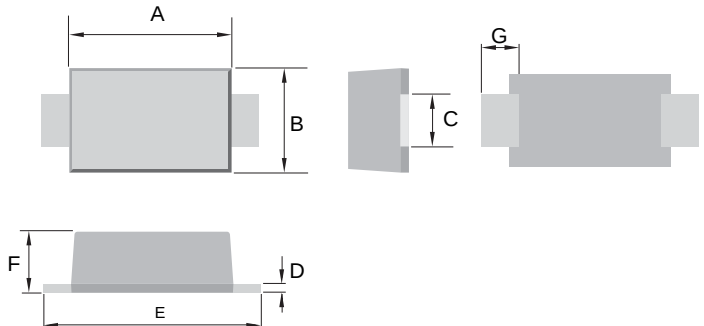


Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 1.5 0A 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	SS52BF	SS53BF	SS54BF	SS55BF	SS56BF	SS58BF	SS510BF	SS515BF	SS520BF	Unit	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	80	100	150	200	V	
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	70	105	140	V	
Average Rectified Output Current @T _L = 75°C	IO	5.0									A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150									A	
Forward Voltage @IF = 5.0A	VFM	0.55			0.70		0.85		0.90		V	
Peak Reverse Current @TA = 25°C At Rated DC Blocking Voltage @TA = 100°C	IRM	0.5 20									mA	
Typical Thermal Resistance (Note 1)	RθJL RθJA	28 88									°C/W	
Typical Junction Capacitance	Cj	800					500					pF
Operating Temperature Range	Tj	-65 to +125									°C	
Storage Temperature Range	TSTG	-65 to +150									°C	

Note: 1. Mounted on P.C. Board with 5.0mm² copper pad area.

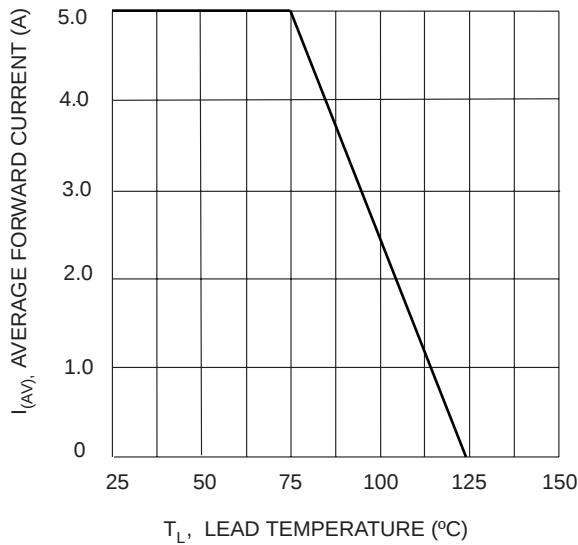


Fig. 1 Forward Current Derating Curve

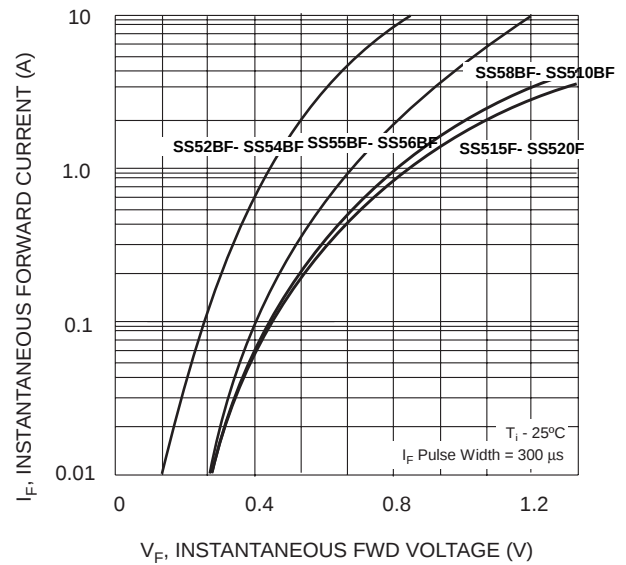


Fig. 2 Typ. Forward Characteristics

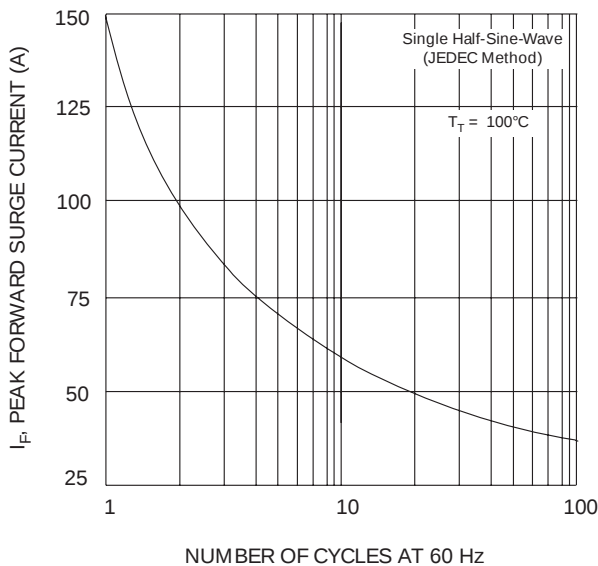


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

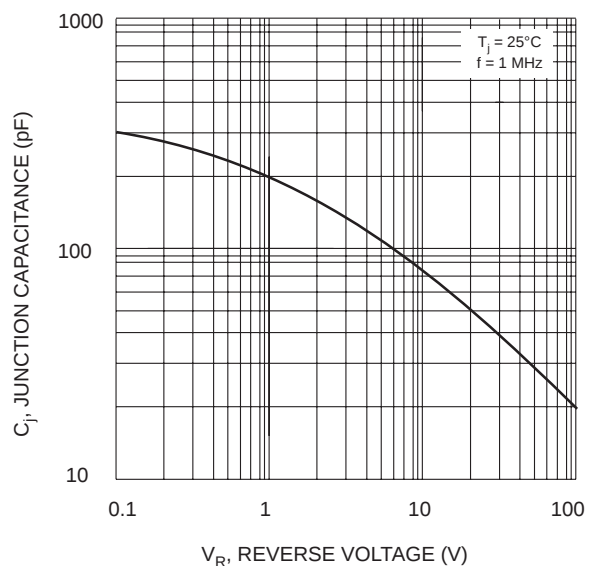


Fig. 4 Typical Junction Capacitance

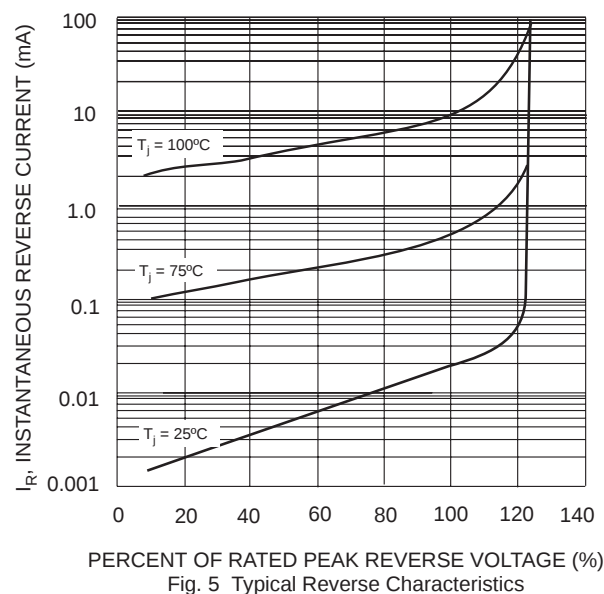


Fig. 5 Typical Reverse Characteristics