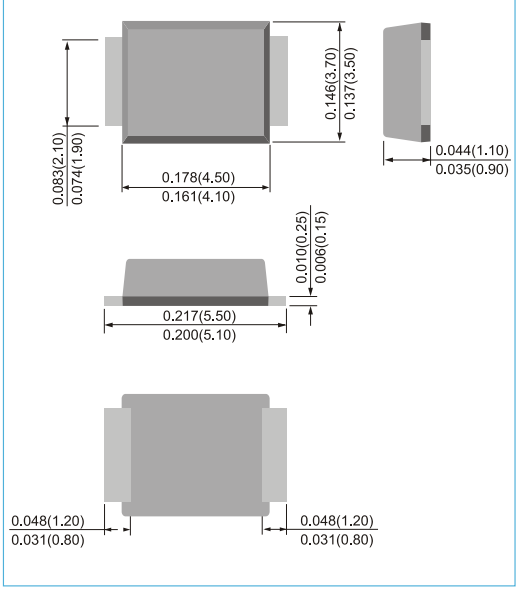
SR52F SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20-60 Volts **CURRENT** 5 Amperes

SMBF Unit : inch(mm)

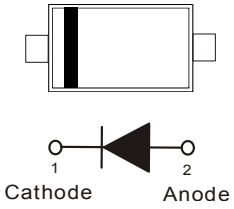


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SMBF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams
- Polarity : Color band denotes cathode end



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	SR52F	SR53F	SR54F	SR55F	SR56F	UNITS
Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
RMS Voltage	V_{RMS}	14	21	28	35	42	V
DC Blocking Voltage	V_R	20	30	40	50	60	V
Average Forward Current	$I_{F(AV)}$	5.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	100					A
Forward Voltage at 5.0A	V_F	0.55			0.7		V
DC Reverse Current at Rated DC Blocking Voltage T_J=25°C	I_R	0.1					mA
Typical Junction capacitance V_R=4V,1MHz	C_J	235			190		pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	17 135					°C / W
Operating Junction Temperature and Storage Temperature Range	T_J,T_{STG}	-55 to +150					°C

NOTES :

1.Mounted on an FR4 PCB, single-sided copper, with 48cm^{2}copper pad area.

2.Mounted on an FR4 PCB, single-sided copper, mini pad.

SR52F SERIES

RATING AND CHARACTERISTIC CURVES

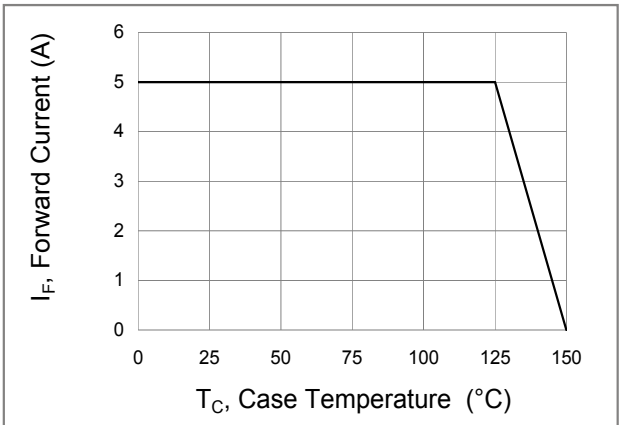


Fig.1 Forward Current Derating Curve

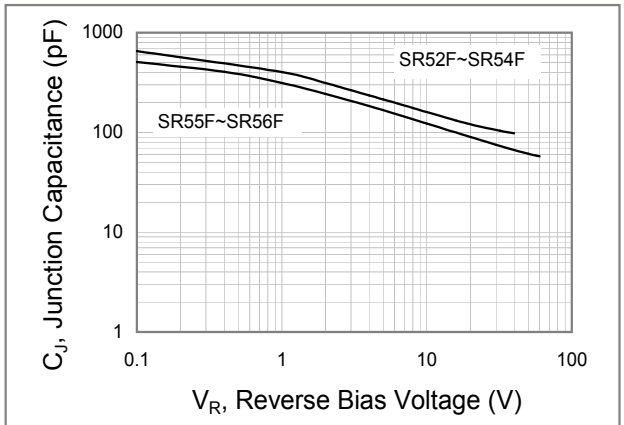


Fig.2 Typical Junction Capacitance

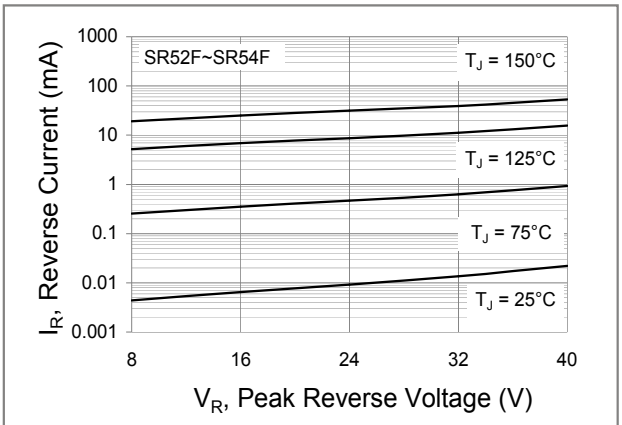


Fig.3 Typical Reverse Characteristics

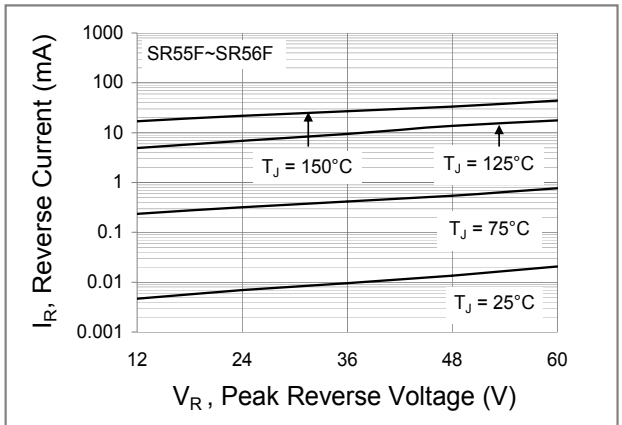


Fig.4 Typical Reverse Characteristics

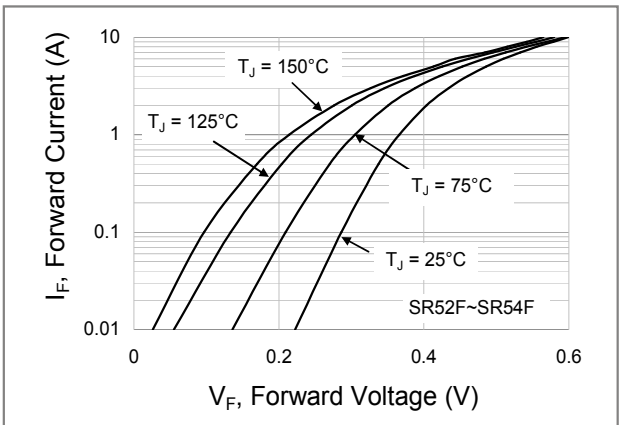


Fig.5 Typical Forward Characteristics

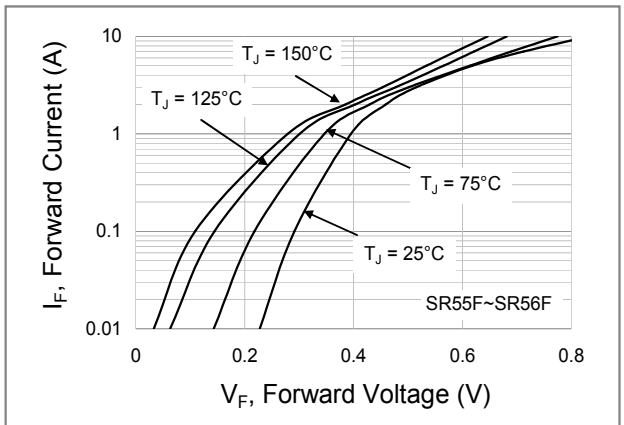
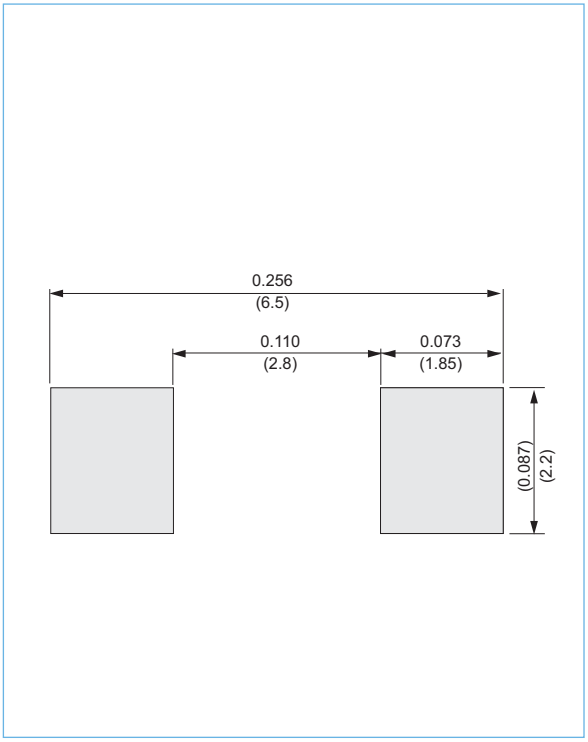


Fig.6 Typical Forward Characteristics

SR52F SERIES

MOUNTING PAD LAYOUT

SMBF Unit:inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 5K per 13" plastic Reel

LEGAL STATEMENT

SR52F SERIES

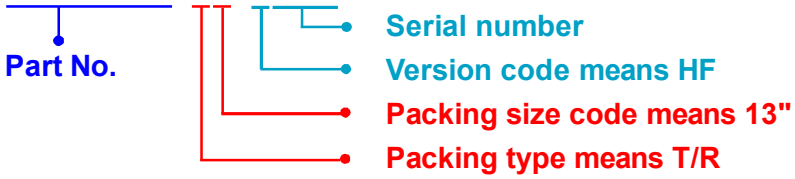
Part No_packing code_Version

SR52F_R1_00001

SR52F_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

SR52F SERIES

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