

SX52F SERIES

SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20-40 Volts **CURRENT** 5 Amperes

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)

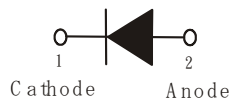
MECHANICAL DATA

Case : SMAF, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

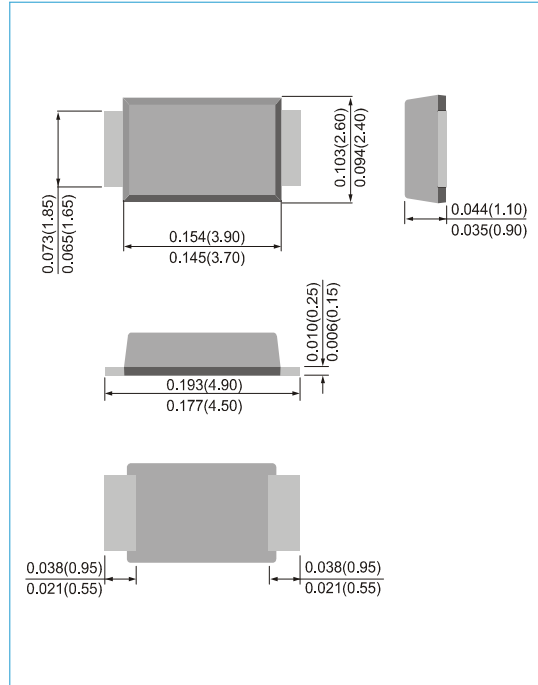
Polarity: Color band denotes cathode end

Weight: 0.0011 ounces, 0.0328 grams



SMAF

Unit : inch(mm)



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

PARAMETER	SYMBOL	SX52F	SX53F	SX54F	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	V
RMS Voltage	V _{RMS}	14	21	28	V
DC Blocking Voltage	V _R	20	30	40	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	0.54			V
DC Reverse Current at Rated DC Blocking Voltage T _J =25°C	I _R	100			μA
Typical Junction capacitance V _R =10V,1MHz	C _J	159			pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 1)	R _{θJL} R _{θJA}	20 83			°C/W
Operating Junction Temperature and Storage Temperature Range	T _J , T _{STG}	-55 to +150			°C

NOTES:

- 1.Mounted on 48cm² FR-4 PCB.

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RATING AND CHARACTERISTIC CURVES

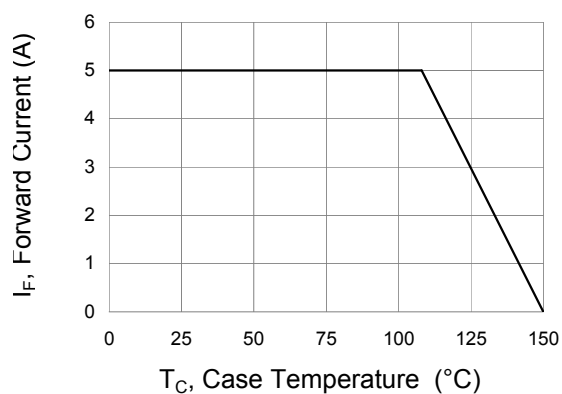


Fig.1 Forward Current Derating Curve

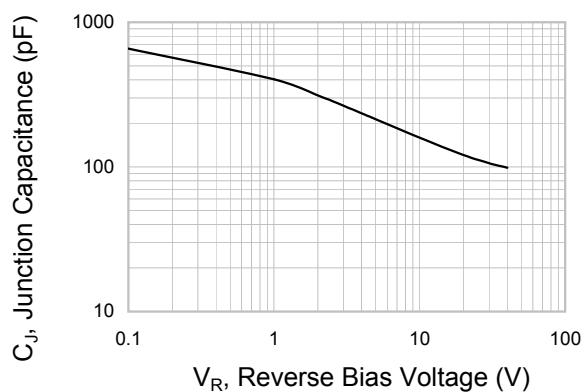


Fig.2 Typical Junction Capacitance

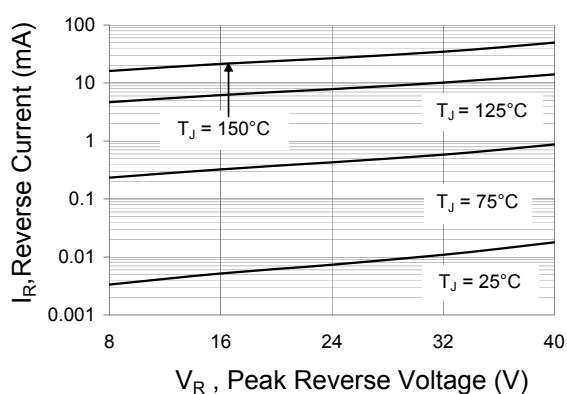


Fig.3 Typical Reverse Characteristics

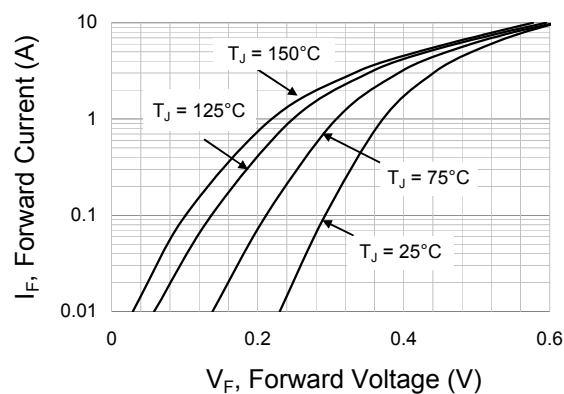


Fig.4 Typical Forward Characteristics

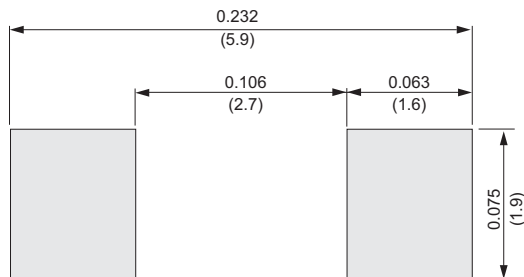


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MOUNTING PAD LAYOUT

SMAF

Unit:inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

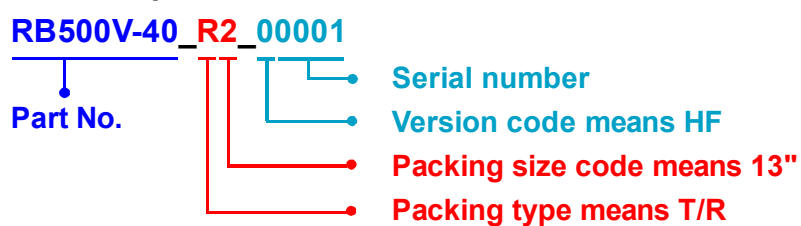
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Part No_packing code_Version

SX52F_R1_00001

SX52F_R2_00001

For example :



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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			



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