

SX52F~SX56F

SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20-60 Volt **CURRENT** 5 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss, high efficiency
- High surge capacity
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

Case : SMAF, Plastic

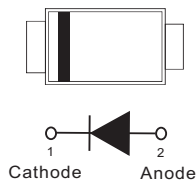
Terminals : Solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

Standard packaging : 12mm tape (EIA-481)

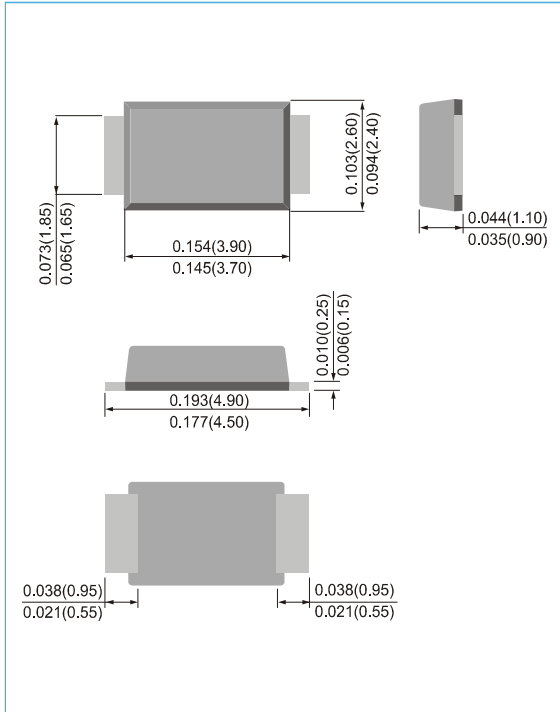
Weight : 0.0012 ounces, 0.0328 grams

Marking : Part number



SMAF

Unit : inch(mm)



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

PARAMETER	SYMBOL	SX52F	SX53F	SX54F	SX54AF	SX56F	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	45	60	V
RMS Voltage	V _{RMS}	14	21	28	31	42	V
DC Blocking Voltage	V _R	20	30	40	45	60	V
Average Forward Current	I _{F(AV)}	5					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100					A
Forward Voltage at 5A	V _F	0.54				0.66	V
DC Reverse Current at Rated DC Blocking Voltage T _J =25°C	I _R	100			150	100	μA
DC Reverse Current at Rated DC Blocking Voltage T _J =100°C	I _R	30				20	mA
Typical Junction Capacitance V _R =10V, 1MHz	C _J	159				125	pF
Typical Thermal Resistance (Note 1) (Note 2)	R _{θJA} R _{θJL}	150 15					°C/W
Operating Junction Temperature and Storage Temperature Range	T _J , T _{STG}	-55 to +150					°C

NOTES:1.Mounted on a FR4 PCB, single-sided copper, mini pad.

2.Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area

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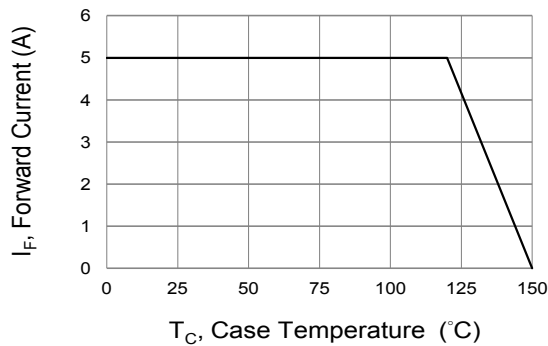


Fig.1 Forward Current Derating Curve

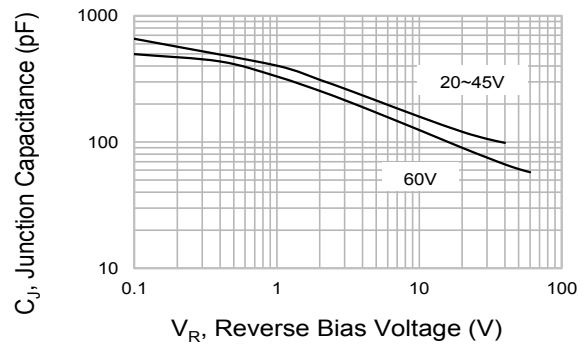


Fig.2 Typical Junction Capacitance

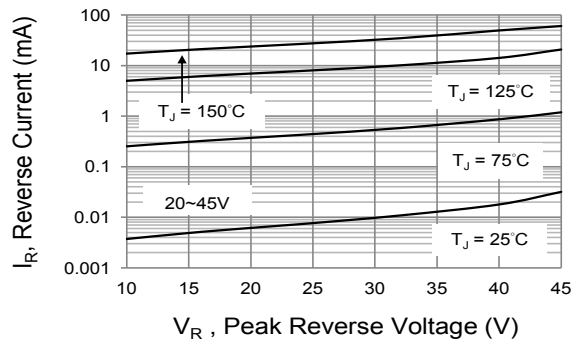


Fig.3 Typical Reverse Characteristics

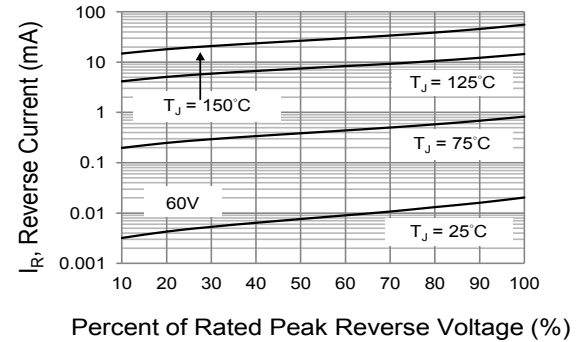


Fig.4 Typical Reverse Characteristics

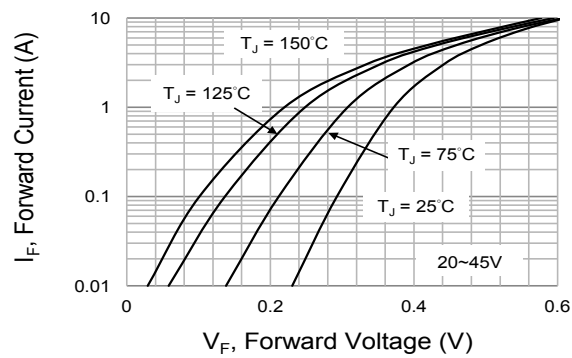


Fig.5 Typical Forward Characteristics

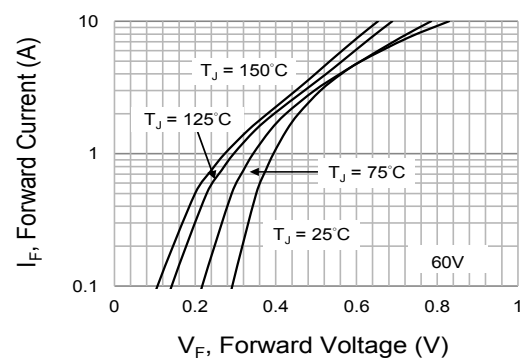


Fig.6 Typical Forward Characteristics

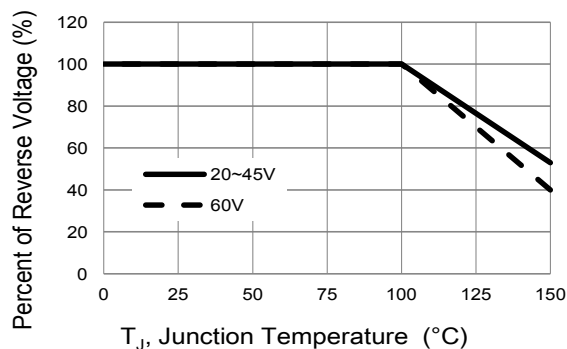
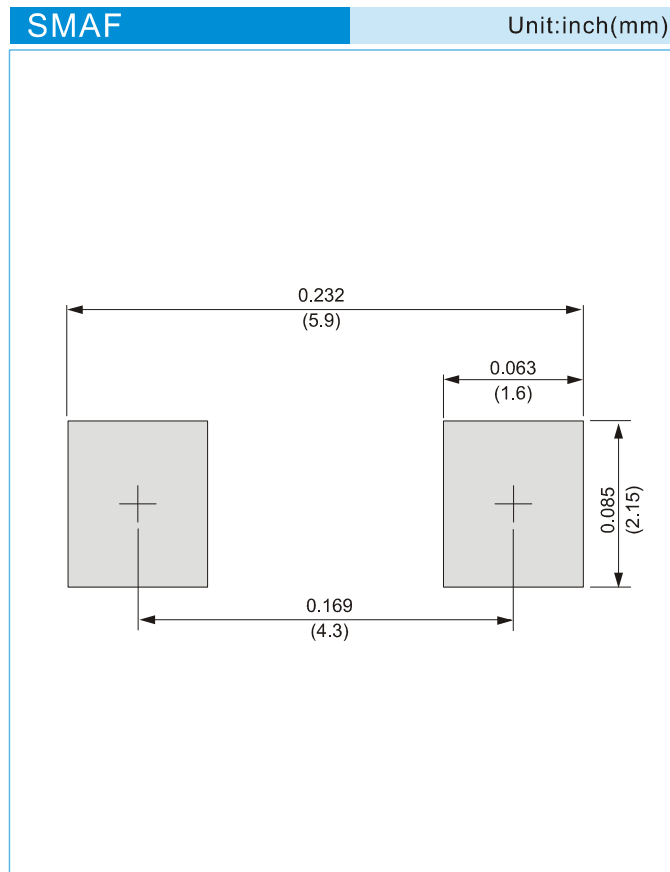


Fig.7 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT



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 :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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