



SXM56LF

ULTRA LOW VF SCHOTTKY RECTIFIER

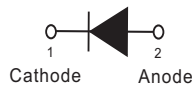
VOLTAGE 60 Volt **CURRENT** 5 Ampere

FEATURES

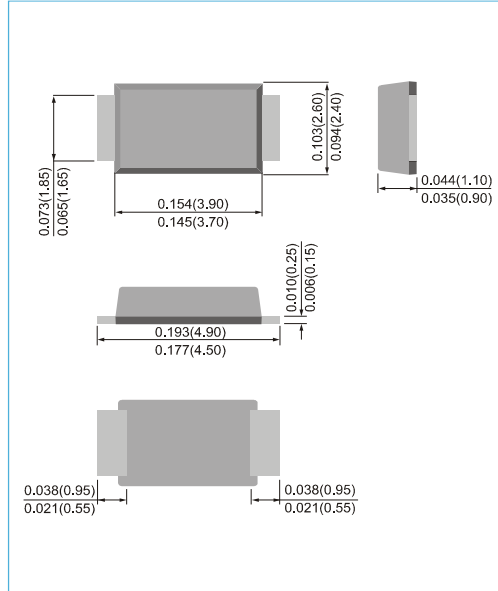
- Ideal for automated placement
- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case : SMAF Molded 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($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	60	V
Maximum RMS Voltage	V_{RMS}	42	V
Maximum DC Blocking Voltage	V_R	60	V
Maximum Average Rectified Output Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80	A
Typical Junction Capacitance ($V_R=4V$, $f=1\text{MHz}$)	C_J	200	pF
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	20	$^\circ\text{C/W}$
(Note 2)	$R_{\theta JA}$	150	
Operating Junction Temperature Range And Storage Temperature Range	T_J, T_{STG}	-55 to + 150	$^\circ\text{C}$

NOTES:1.Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area
2.Mounted on a FR4 PCB, single-sided copper, mini pad.



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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT	
Breakdown voltage	V _{BR}	I _R =0.5mA T _J =25°C	60	-	-	V	
Instantaneous forward voltage	V _F	I _F =1A	-	0.34	-	V	
		I _F =3A	-	0.45	-		
		I _F =5A	-	-	0.6		
		I _F =1A	-	0.27	-	V	
I _F =3A	T _J =125°C	-	0.44	-			
I _F =5A	-	-	0.54	-			
Reverse current	I _R	V _R =48V T _J =25°C	-	35	-	μA	
		V _R =60V	T _J =25°C	-	-	220	μA
			T _J =100°C	-	-	15	mA
		T _J =125°C	-	10	-	mA	



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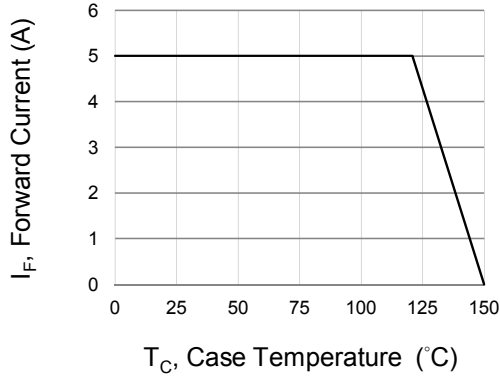


Fig.1 Forward Current Derating Curve

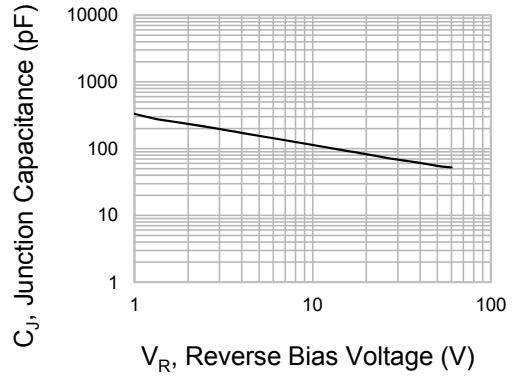


Fig.2 Typical Junction Capacitance

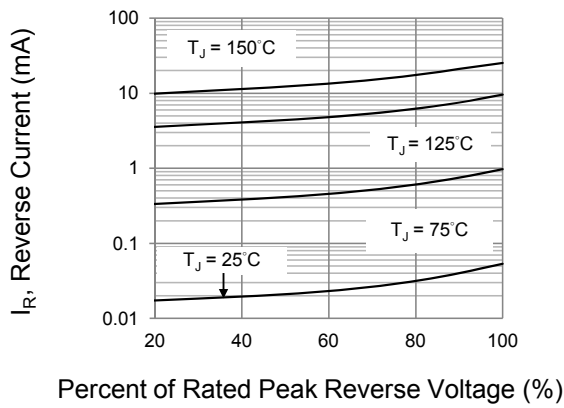


Fig.3 Typical Reverse Characteristics

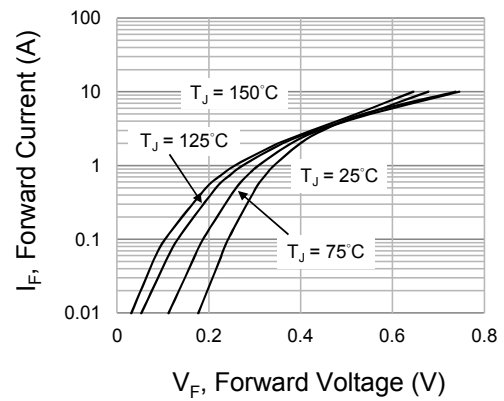


Fig.4 Typical Forward Characteristics

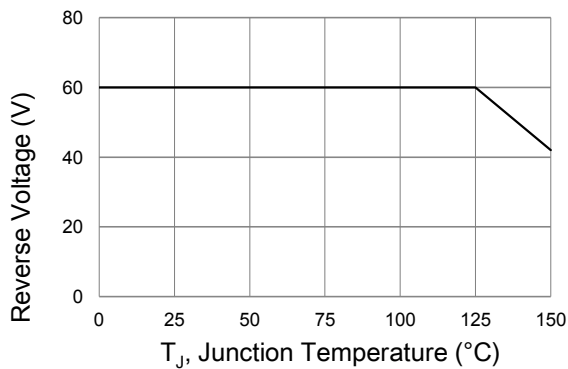
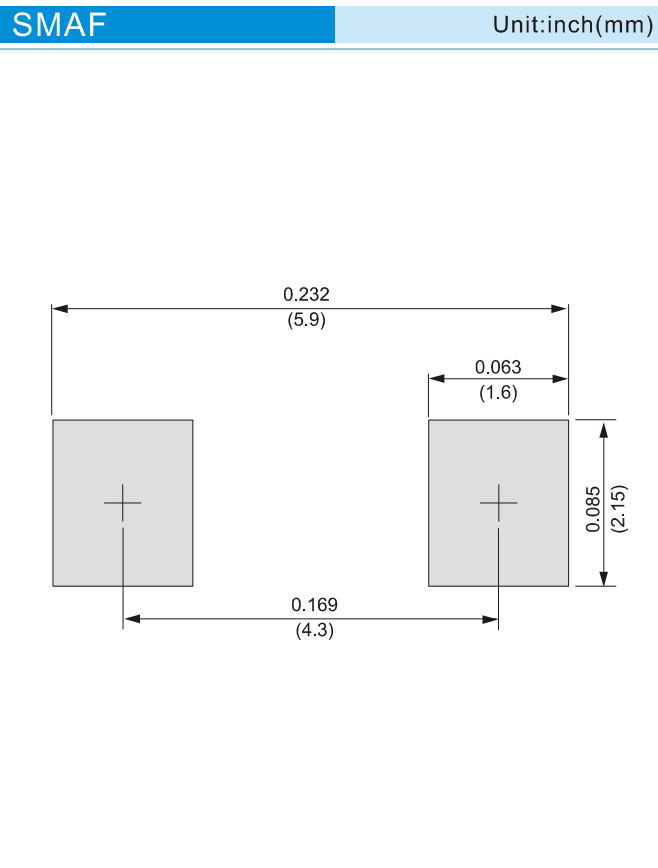


Fig.5 Operating Temperature Derating Curve



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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

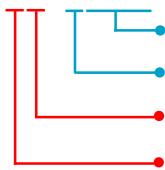
SXM56LF_R1_00001

SXM56LF_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 XXXXX		
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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