



SXM54ALF

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 45 Volts **CURRENT** 5 Amperes

SMAF Unit : inch(mm)

FEATURES

- Ideal for automated placement
- Ultra Low forward voltage drop, low power losses
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

Case : SMAF Molded Plastic

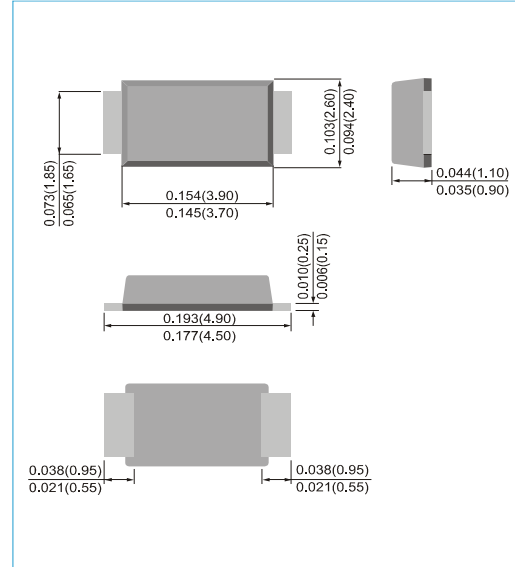
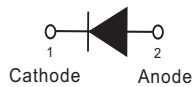
Terminals : Solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

Standard packaging : 12mm tape (EIA-481)

Weight : 0.0011 ounces, 0.0328 grams

Marking : SXM54ALF



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	45	V
Maximum RMS Voltage	V _{RMS}	32	V
Maximum DC Blocking Voltage	V _R	45	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 (JEDEC method)	I _{FSM}	150	A
Typical Junction Capacitance (V _R =4V, f=1MHz)	C _J	220	pF
Typical Thermal Resistance (Note 1)	R _{θJL}	20	°C/W
(Note 2)	R _{θJA}	150	
Operating Junction Temperature Range And Storage Temperature Range	T _J ,T _{STG}	-55 to + 150	°C

NOTES:1.Mounted on an FR4 PCB, single-sided copper, with 10cm*10cm copper pad area
2.Mounted on an FR4 PCB, single-sided copper, mini pad.



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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =0.5mA	45	-	-	V
Instantaneous forward voltage	V _F	I _F =1A	-	0.34	-	V
		I _F =2A	-	0.38	-	
		I _F =5A	-	0.48	0.54	
		T _J =25°C	-	-	-	-
Reverse current	I _R	V _R =36V	-	20	-	μA
		V _R =45V	-	-	210	μA
		T _J =25°C	-	-	-	-
		T _J =125°C	-	7	-	mA

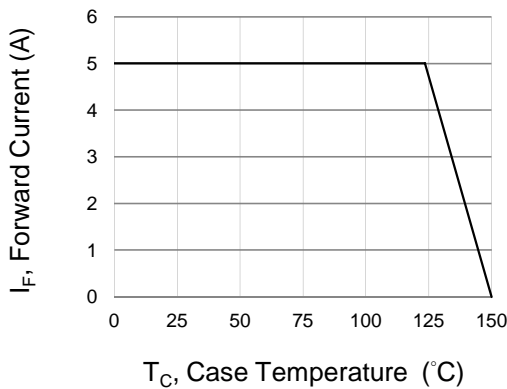


Fig.1 Forward Current Derating Curve

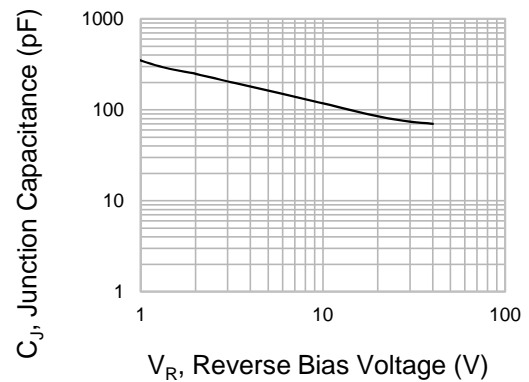


Fig.2 Typical Junction Capacitance

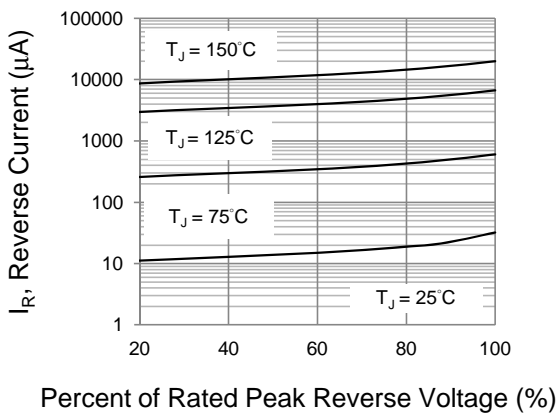


Fig.3 Typical Reverse Characteristics

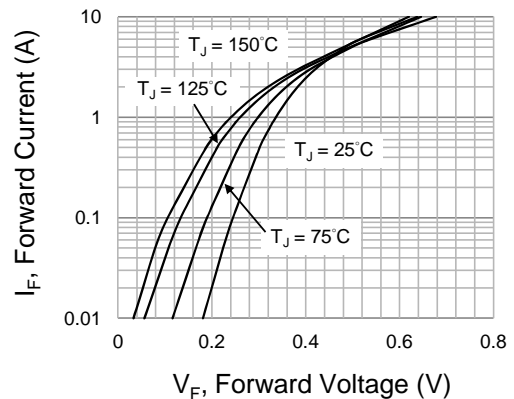
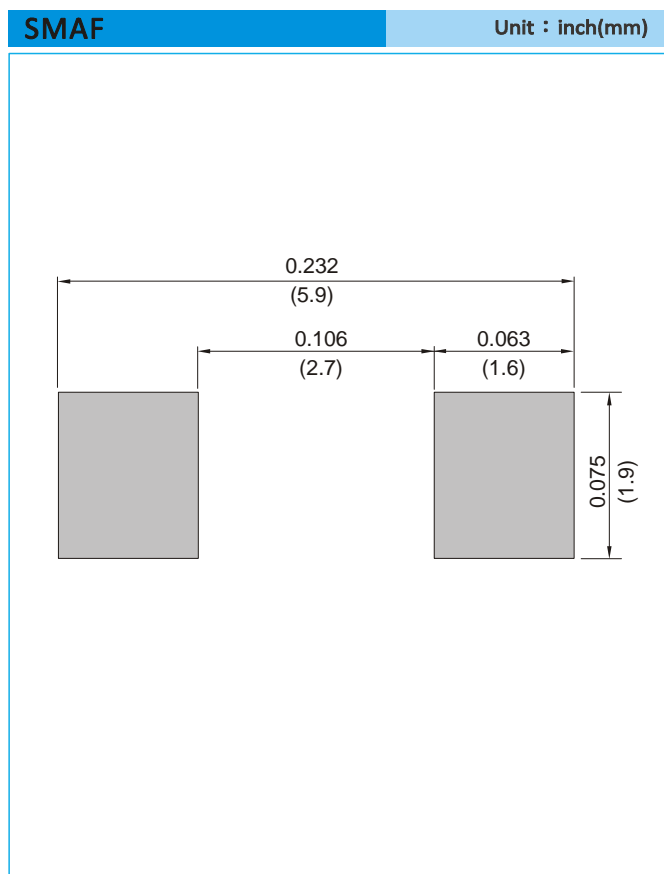


Fig.4 Typical Forward Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

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



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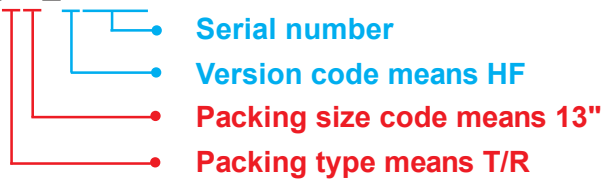
Part No_packing code_Version

SXM54ALF_R2_00001

For example :

RB500V-40_R2_00001

Part No.



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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