



SRM54AVF

LOW VF SCHOTTKY

VOLTAGE 45 Volt **CURRENT** 5 Ampere

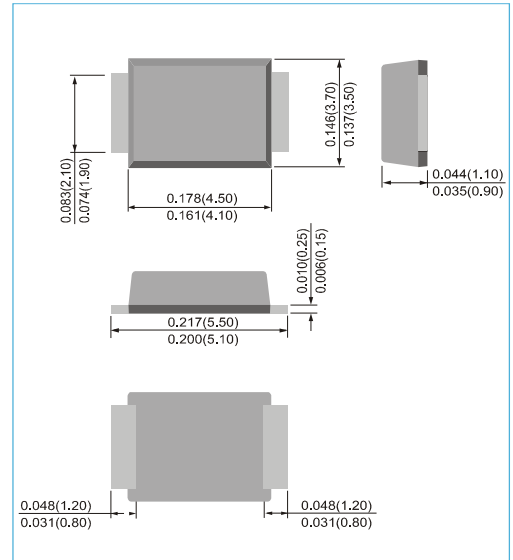
SMBF Unit : inch(mm)

FEATURES

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

MECHANICAL DATA

- Case: Plastic molded, SMBF
- 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(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	45	V
Maximum rms voltage	V _{RMS}	32	V
Maximum dc blocking voltage	V _R	45	V
Maximum average forward rectified current	I _{F(AV)}	5	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150	A
Typical thermal resistance	(Note 1) R _{θJL}	27	°C/W
	(Note 1) R _{θJC}	12	
	(Note 2) R _{θJA}	135	
Typical junction capacitance (V _R =4V, f=1MHz)	C _J	500	pF
Operating junction temperature range	T _J	-55 to + 150	°C
Storage temperature range	T _{STG}	-55 to + 150	°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	45	-	-	V
Instantaneous forward voltage	V _F	I _F =1A I _F =5A T _J =25°C	- -	0.3 0.39	- 0.43	V
		I _F =1A I _F =5A T _J =125°C	- -	0.21 0.35	- -	V
Reverse current	I _R	V _R =36V T _J =25°C	-	70	-	μA
		V _R =45V T _J =25°C T _J =125°C	- -	- 19	210 -	μA mA



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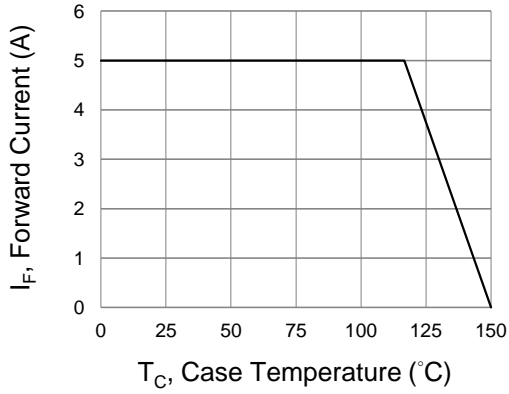


Fig.1 Forward Current Derating Curve

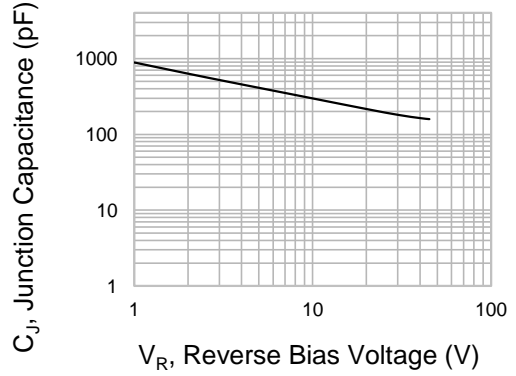


Fig.2 Typical Junction Capacitance

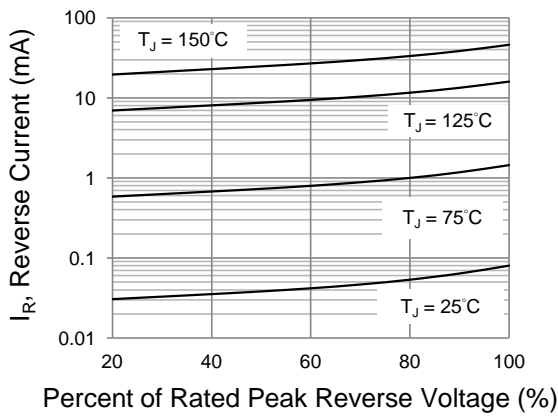


Fig.3 Typical Reverse Characteristics

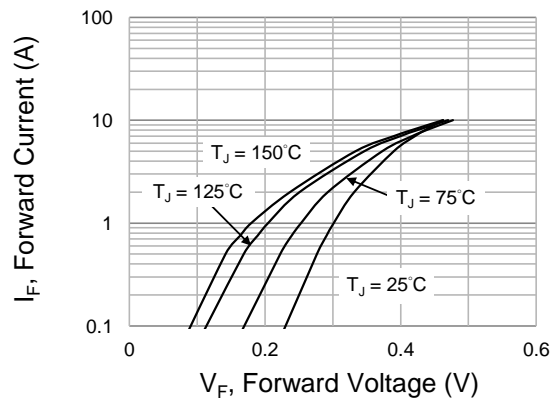


Fig.4 Typical Forward Characteristics

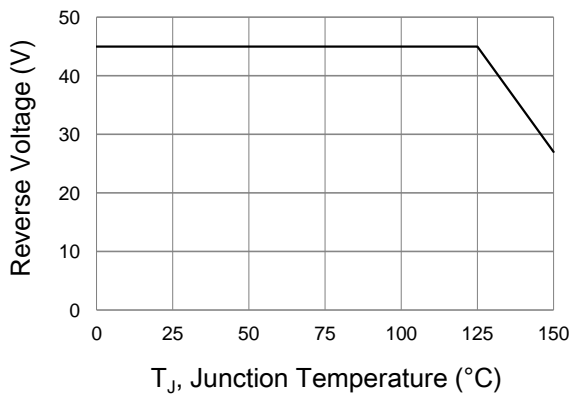
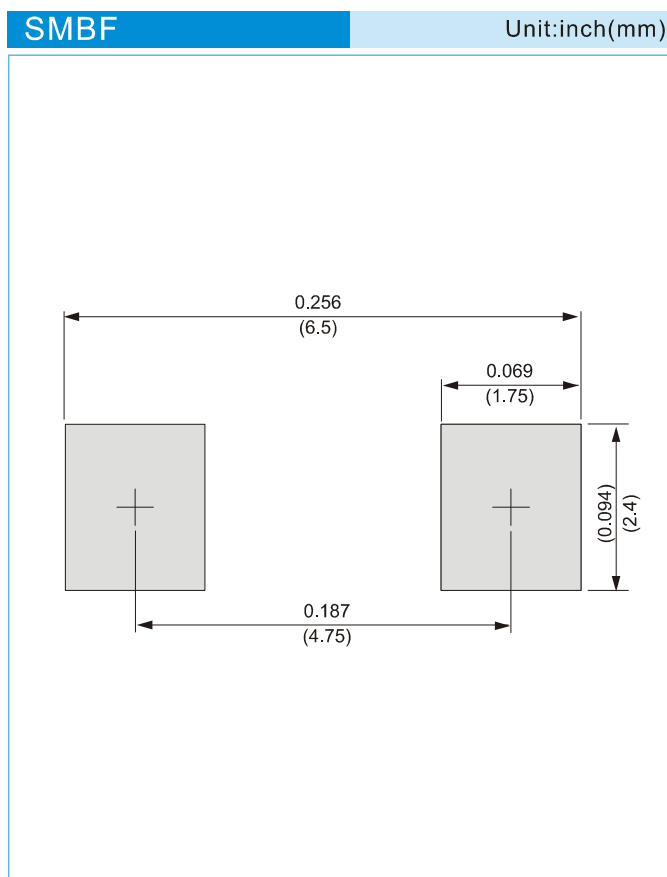


Fig.5 Operating Temperature Derating Curve



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 5K per 13" plastic Reel



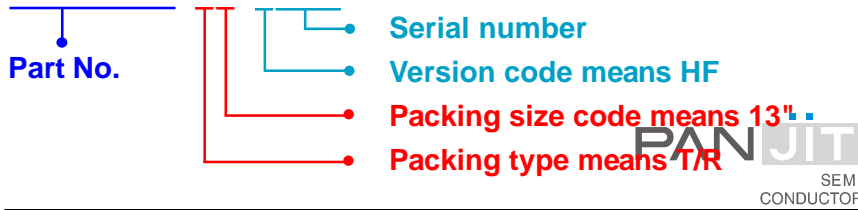
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Part No_packing code_Version

SRM54AVF_R2_00001

For example :

RB500V-40_R2_00001



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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