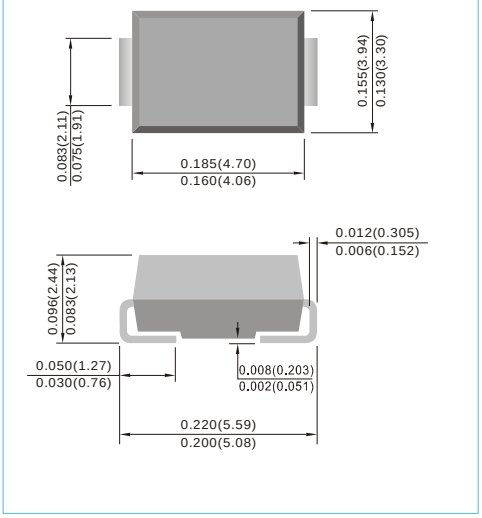
SRM54AV

ULTRA LOW VF SCHOTTKY

VOLTAGE 45 Volt **CURRENT** 5 Ampere

SMB / DO-214AA Unit : inch(mm)

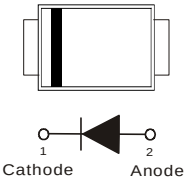


FEATURES

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

MECHANICAL DATA

- Case : JEDEC DO-214AA molded plastic
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Standard packaging : 12mm tape (EIA-481)
- Weight : 0.0032 ounce, 0.092 gram



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}	120	A
Typical thermal resistance (Note 1)	$R_{\Theta JA}$	135	°C/W
Typical junction capacitance (V_R=4V, f=1MHz)	C_J	350	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, 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		45	-	-	V
Instantaneous forward voltage	V_F	I_F=1A I_F=5A	T_J=25°C	- -	0.32 0.43	- 0.49	V
		I_F=1A I_F=5A	T_J=125°C	- -	0.23 0.41	- -	V
Reverse current	I_R	V_R=36V		-	25	-	μA
		V_R=45V	T_J=25°C T_J=125°C	- -	- 10	210 -	μA mA

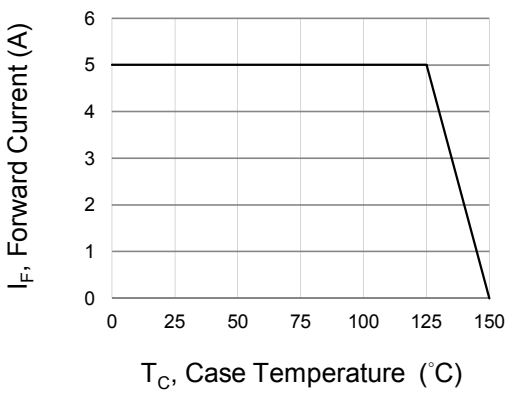


Fig.1 Forward Current Derating Curve

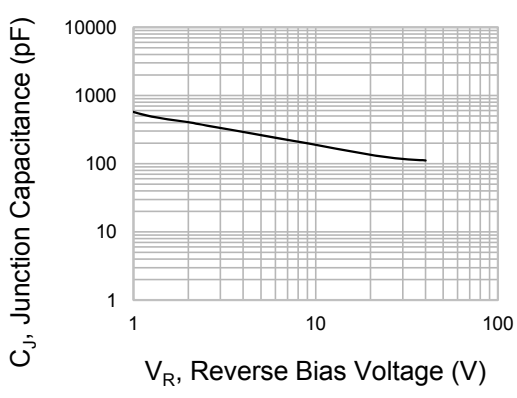


Fig.2 Typical Junction Capacitance

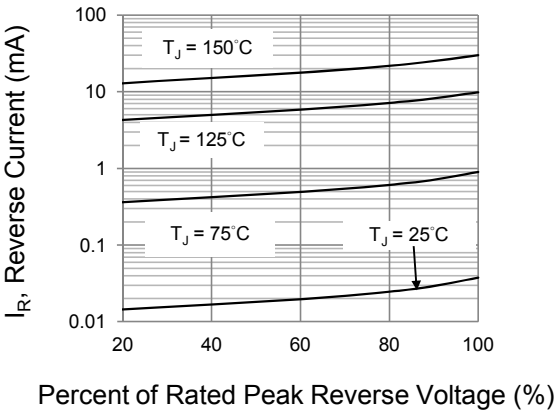


Fig.3 Typical Reverse Characteristics

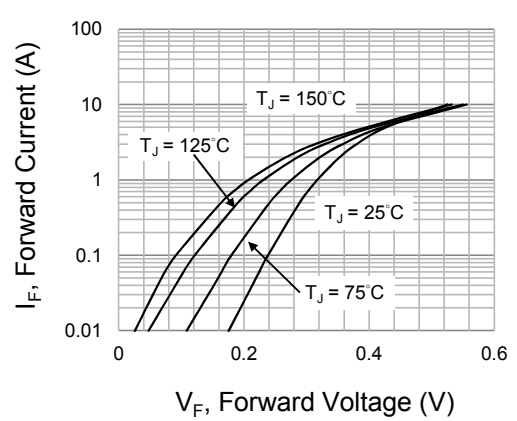
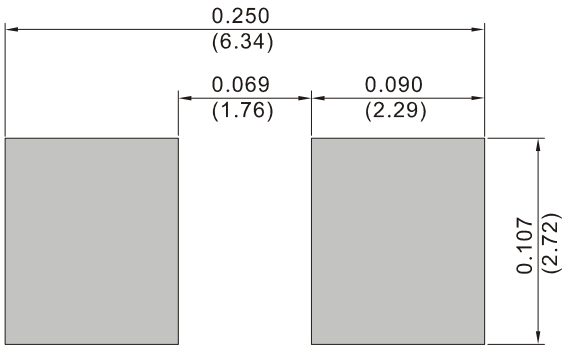


Fig.4 Typical Forward Characteristics

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MOUNTING PAD LAYOUT

SMB / DO-214AA Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 3K per 13" plastic Reel

  T/R - 0.5K per 7" plastic Reel

SRM54AV

Part No_packing code_Version

SRM54AV_R1_00001

SRM54AV_R2_00001

For example :

RB500V-40_R2_00001



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

SRM54AV

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