



# SRM860VF

## ULTRA LOW VF SCHOTTKY BARRIER RECTIFIER

VOLTAGE 60 Volt CURRENT 8 Ampere

SMBF

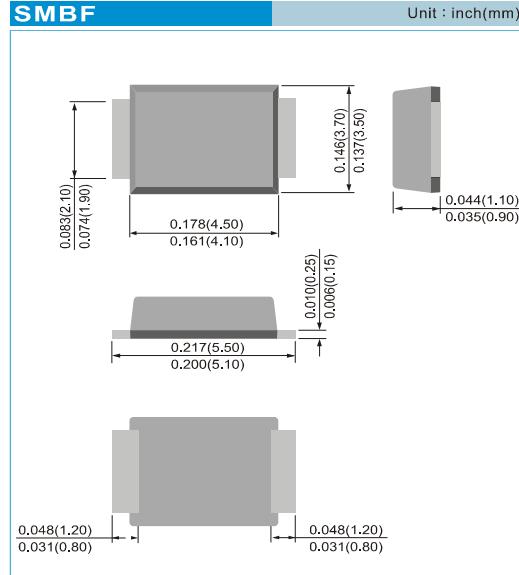
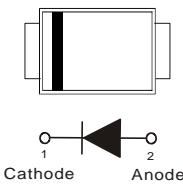
Unit : inch(mm)

### 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 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: plastic molded
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams
- Polarity: Color band denotes cathode end
- Marking: Part number



### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	42	V
Maximum DC Blocking Voltage	V <sub>R</sub>	60	V
Average Rectified Output Current	I <sub>F(AV)</sub>	8	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	150	A
Typical Junction Capacitance (V <sub>R</sub> =4V, f=1MHz)	C <sub>J</sub>	410	pF
Typical Thermal Resistance Note 2 Note 1	R <sub>θJA</sub> R <sub>θUL</sub>	135 10	°C/W
Operating Junction Temperature and Storage Temperature range	T <sub>J,TSTG</sub>	-55 to + 150	°C

### NOTES :

- 1.Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area.
- 2.Mounted on a FR4 PCB, single-sided copper, mini pad.



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## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Break down voltage	V <sub>BR</sub>	I <sub>R</sub> =0.5mA T <sub>A</sub> =25°C	60	-	-	V
Instantaneous forward voltage	V <sub>F</sub>	I <sub>F</sub> =1A T <sub>A</sub> =25°C	-	0.31	-	V
		I <sub>F</sub> =5A T <sub>A</sub> =25°C	-	0.43	-	V
Reverse current	I <sub>R</sub>	I <sub>F</sub> =8A T <sub>A</sub> =25°C	-	0.49	0.55	
		I <sub>F</sub> =1A T <sub>A</sub> =125°C	-	0.22	-	V
		I <sub>F</sub> =5A T <sub>A</sub> =125°C	-	0.39	-	V
		V <sub>R</sub> =42V T <sub>A</sub> =25°C	-	40	-	µA
		V <sub>R</sub> =60V T <sub>A</sub> =25°C	-	-	220	µA
		T <sub>A</sub> =125°C	-	20	-	mA



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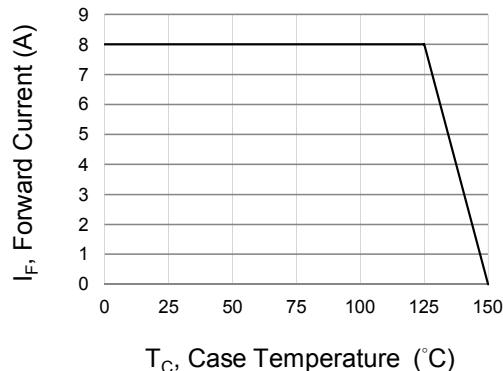


Fig.1 Forward Current Derating Curve

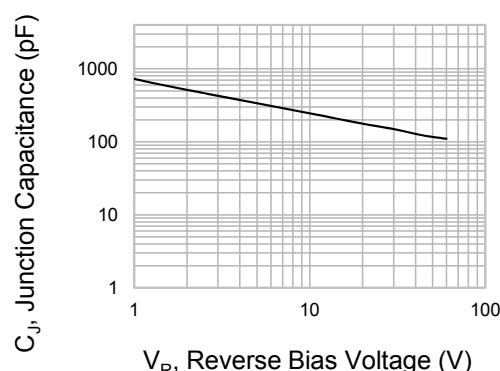


Fig.2 Typical Junction Capacitance

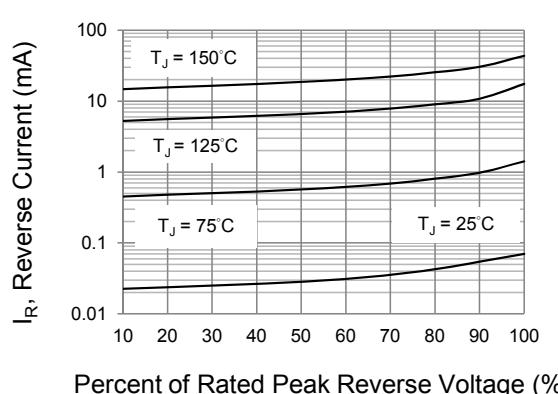


Fig.3 Typical Reverse Characteristics

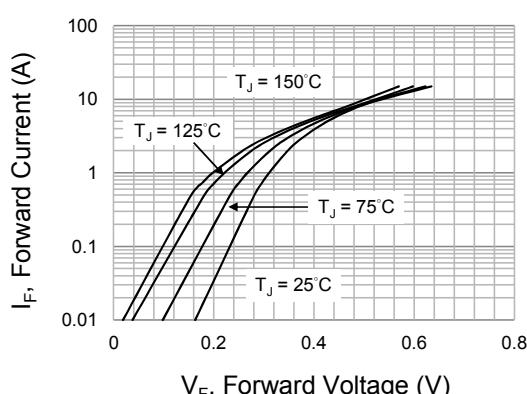


Fig.4 Typical Forward Characteristics

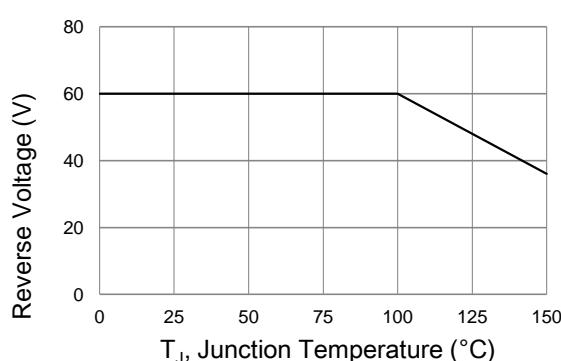


Fig.5 Operating Temperature Derating Curve

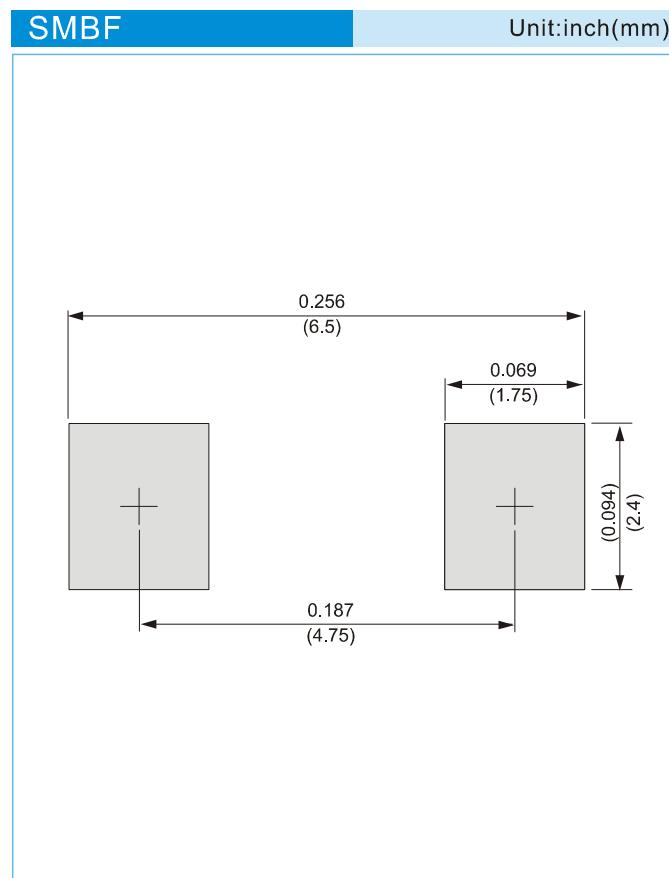


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## MOUNTING PAD LAYOUT

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## ORDER INFORMATION

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

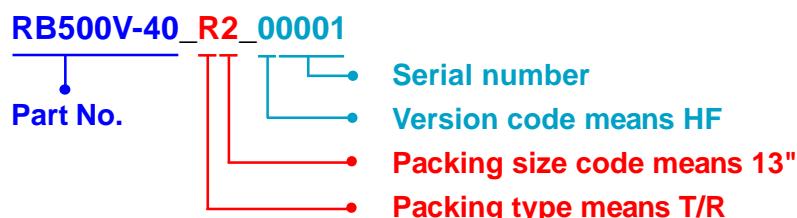


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## Part No\_packing code\_Version

SRM860VF\_R2\_00001

For example :



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