



# SR52F SERIES

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

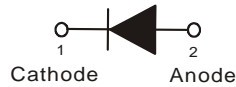
**VOLTAGE** 20-60 Volt **CURRENT** 5 Ampere

### FEATURES

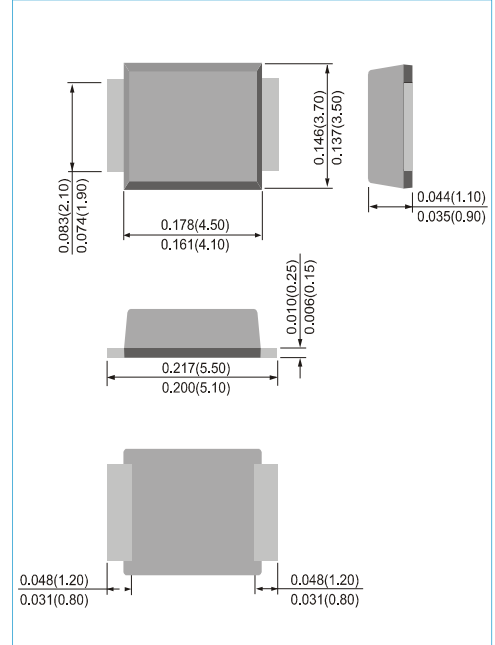
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low profile package
- Low power loss,high efficiency
- High surge capacity
- Easy pick and place package suitable for automated handling
- Lead free in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

### MECHANICAL DATA

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



**SMBF** Unit : inch(mm)



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

PARAMETER	SYMBOL	SR52F	SR53F	SR54F	SR55F	SR56F	UNITS
Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	V
RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
DC Blocking Voltage	V <sub>R</sub>	20	30	40	50	60	V
Average Forward Current	I <sub>F(AV)</sub>	5.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	100					A
Forward Voltage at 5.0A	V <sub>F</sub>	0.55			0.7		V
DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1					mA
Typical Junction capacitance	C <sub>J</sub>	235			190		pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	R <sub>θJL</sub> R <sub>θJA</sub>	17 135					°C / W
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150					°C

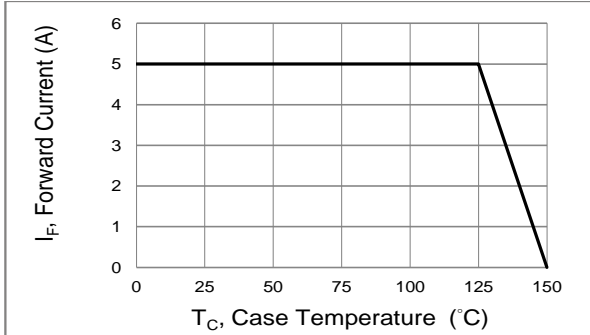
### NOTES :

- 1.Mounted on a FR4 PCB, single-sided copper, with 48cm<sup>2</sup>copper pad area.
- 2.Mounted on a FR4 PCB, single-sided copper, mini pad.

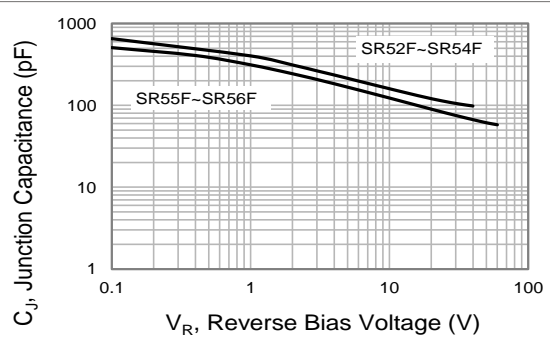


# SR52F SERIES

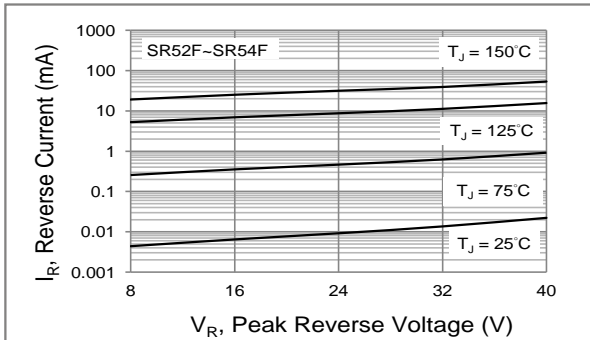
## RATING AND CHARACTERISTIC CURVES



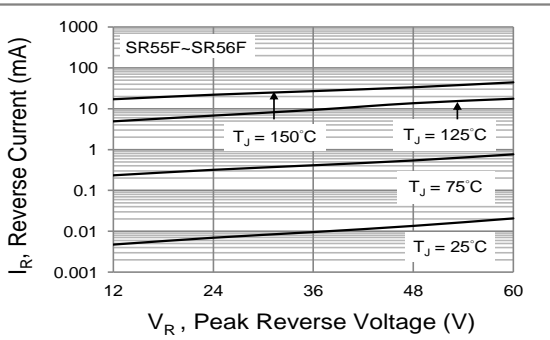
**Fig.1 Forward Current Derating Curve**



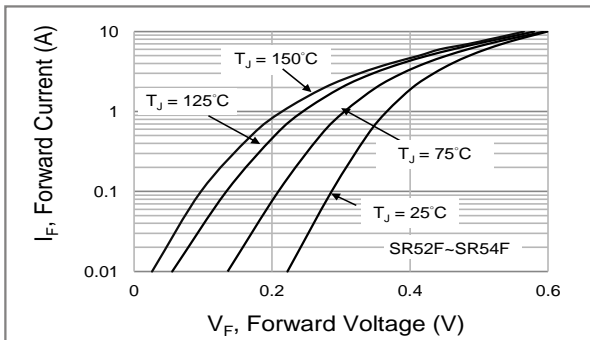
**Fig.2 Typical Junction Capacitance**



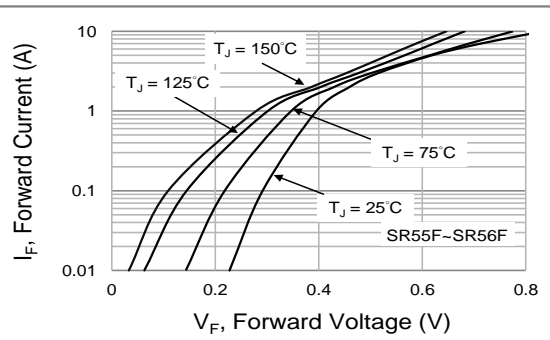
**Fig.3 Typical Reverse Characteristics**



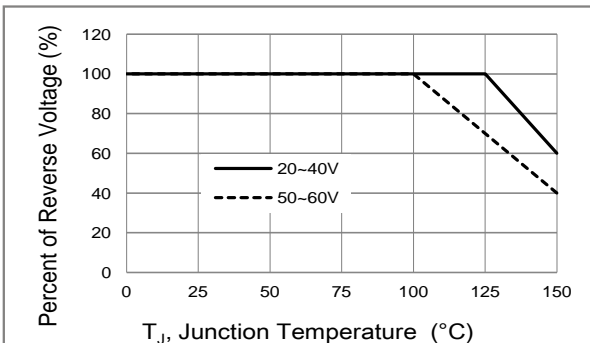
**Fig.4 Typical Reverse Characteristics**



**Fig.5 Typical Forward Characteristics**



**Fig.6 Typical Forward Characteristics**

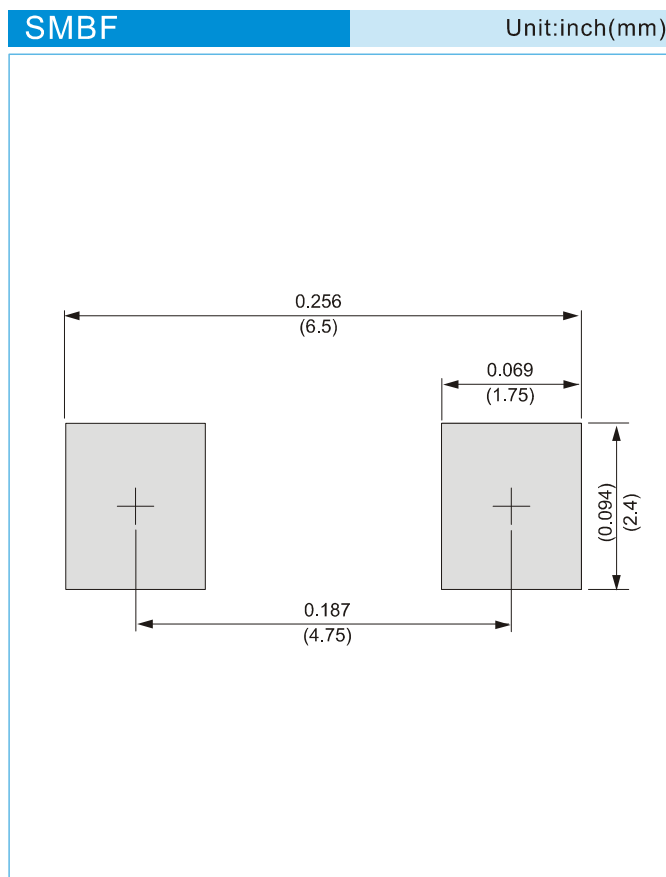


**Fig.7 Operating Temperature Derating Curve**



# SR52F SERIES

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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



# SR52F SERIES

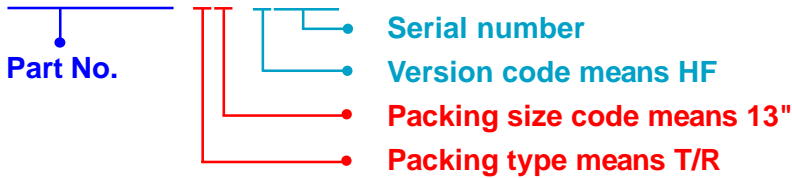
Part No\_packing code\_Version

SR52F\_R1\_00001

SR52F\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



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			



## SR52F SERIES

---

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.