



#### **EXTREME LOW VF SCHOTTKY BARRIER RECTIFIER**

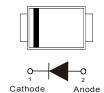
VOLTAGE 100 Volt CURRENT 8 Ampere SMBI

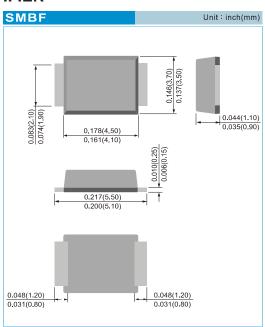
#### **FEATURES**

- · Ideal for automated placement
- · Extreme low forward voltage drop, low power losses
- · High efficiency Operation
- · Low thermal resistance
- · Ultra thin profile package for space constrained utilization
- · Easy pick and place package suitable for automated handling
- · Lead free in compliance with EU RoHS 2.0
- · Green molding compound as per IEC 61249 standard

#### **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		VRRM	100	V
Maximum RMS Voltage		VRMS	70	V
Maximum DC Blocking Voltage		VR	100	V
Average Rectified Output Current		l F(AV)	8	Α
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load		IFSM	150	Α
Typical Thermal Resistance	(Notes 2) (Notes 1)	Roja Rojc	135 10	°C/W
Operating Junction Temperature and Storage Temperature range		Т <sub>J</sub> ,Тsтg	-55 to + 150	°C

NOTES: 1.Mounted on a 10cm x 10cm x 0.5mm copper pad area.

2. Mounted on a FR4 PCB, single-sided copper, mini pad.



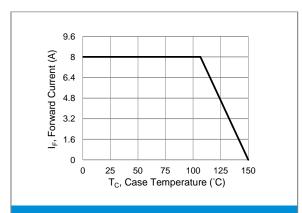


### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Break down voltage	VBR	I R=0.5mA	Ta=25°C	100	-	-	V
Instantaneous forward voltage	VF	F=1A	Ta=25°C Ta=125°C		0.4 0.53 0.6 0.28	- - 0.66	V
Day area as weet	1-	I F=5A VR=70V	Ta=25°C	-	0.48 5	-	μА
Reverse current	IR	VR=100V	Ta=25°C Ta=125°C	-	- 9	80 -	μA mA







**Fig.1 Forward Current Derating Curve** 

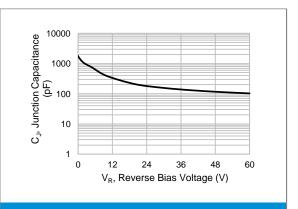


Fig.2 Typical Junction Capacitance

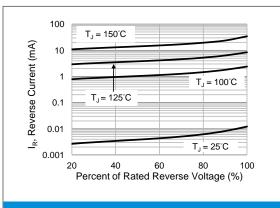
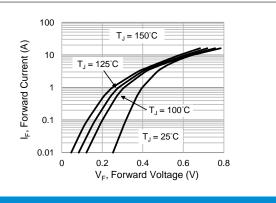
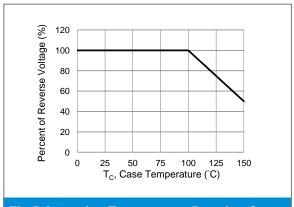


Fig.3 Typical Reverse Characteristics



**Fig.4 Typical Forward Characteristics** 

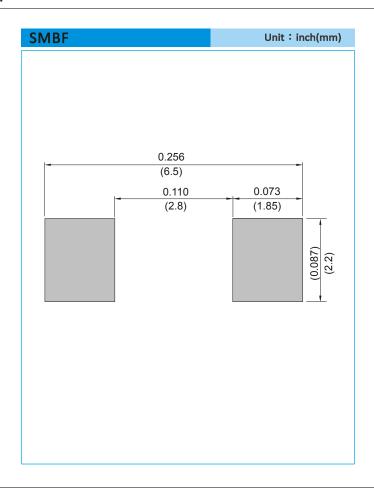


**Fig.5 Operating Temperature Derating Curve** 





### MOUNTING PAD LAYOUT



#### **ORDER INFORMATION**

• Packing information

T/R - 5K per 13" plastic Reel





### Part No\_packing code\_Version

SRT8100UF\_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)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	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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