



#### **ULTRA LOW VF SCHOTTKY BARRIER RECTIFIER**

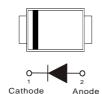
VOLTAGE 100 Volt CURRENT 8 Ampere

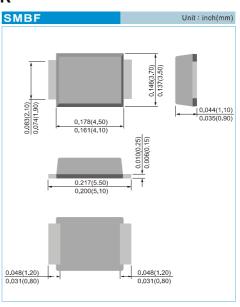
#### **FEATURES**

- · 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
- 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: 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	<b>V</b>
Maximum RMS Voltage		VRMS	70	V
Maximum DC Blocking Voltage		VR	100	V
Maximum Average Rectified Output Current		I F(AV)	8	Α
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load		I FSM	80	А
Typical Junction Capacitance (VR=4V, f=1MHz)		C₁	360	pF
Typical Thermal Resistance	(Notes 1) (Notes 2)	Røjl Røja	15 135	°C/W
Operating Junction Temperature and Storage Temperature range		ТЈ,Тѕтс	-55 to + 150	°C

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

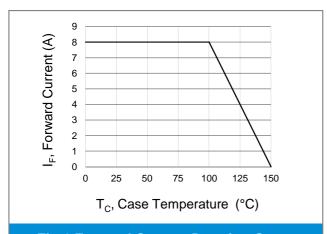
2. Mounted on a FR4 PCB, single-sided copper, mini pad.



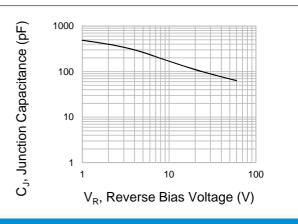


#### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Break down voltage	VBR	I R=0.5mA	T <sub>A</sub> =25°C	100	-	-	V
Instantaneous forward voltage	VF	I F=1A I F=5A I F=8A	Ta=25°C		0.42 0.61 0.71	- - 0.79	V
· ·		I F=1A I F=5A	T <sub>A</sub> =125°C	-	0.33 0.56	-	V
Davis and a surrout	1-	VR=70V	T <sub>A</sub> =25°C	ı	5	-	μΑ
Reverse current	IR	VR=100V	T <sub>A</sub> =25°C T <sub>A</sub> =125°C	-	- 5	50 -	μA mA



**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 

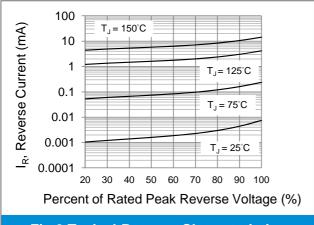


Fig.3 Typical Reverse Characteristics

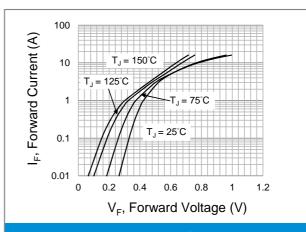
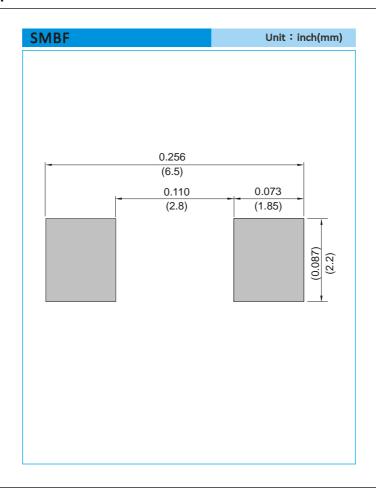


Fig.4 Typical Forward Characteristics





#### MOUNTING PAD LAYOUT



#### **ORDER INFORMATION**

Packing information

T/R - 5K per 13" plastic Reel

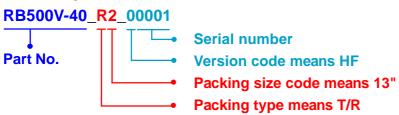




### Part No\_packing code\_Version

SRT8100LF\_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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