

SRT8100UF

EXTREME LOW VF SCHOTTKY BARRIER RECTIFIER

VOLTAGE 100 Volt **CURRENT** 8 Ampere

SMBF Unit : inch(mm)

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 (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	V
Maximum RMS Voltage	V _{RMS}	70	V
Maximum DC Blocking Voltage	V _R	100	V
Average Rectified Output Current	I _{F(AV)}	8	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150	A
Typical Thermal Resistance	(Notes 2) R _{θJA} (Notes 1) R _{θJC}	135 10	°C/W
Operating Junction Temperature and Storage Temperature range	T _J , T _{STG}	-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.

SRT8100UF

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Break down voltage	V _{BR}	I _R =0.5mA T _A =25°C	100	-	-	V
Instantaneous forward voltage	V _F	I _F =1A T _A =25°C	-	0.4	-	V
		I _F =5A T _A =25°C	-	0.53	-	
		I _F =8A T _A =25°C	-	0.6	0.66	
		I _F =1A T _A =125°C	-	0.28	-	V
Reverse current	I _R	V _R =70V T _A =25°C	-	5	-	μA
		V _R =100V T _A =25°C T _A =125°C	- -	- 9	80 -	μA mA

SRT8100UF

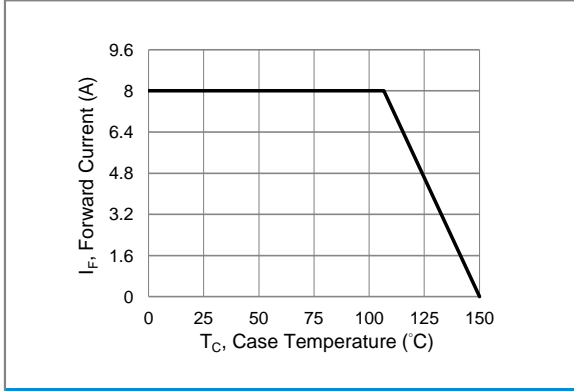


Fig.1 Forward Current Derating Curve

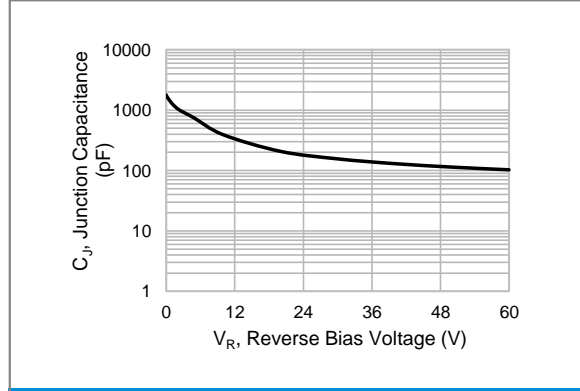


Fig.2 Typical Junction Capacitance

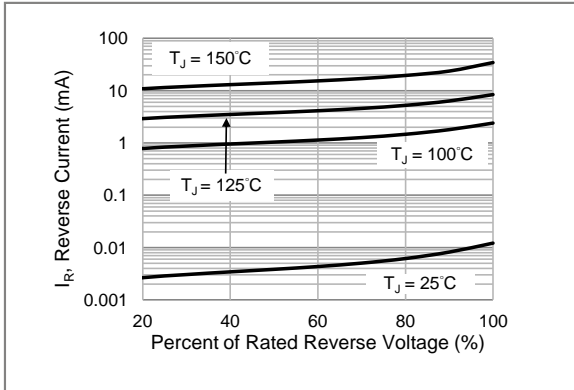


Fig.3 Typical Reverse Characteristics

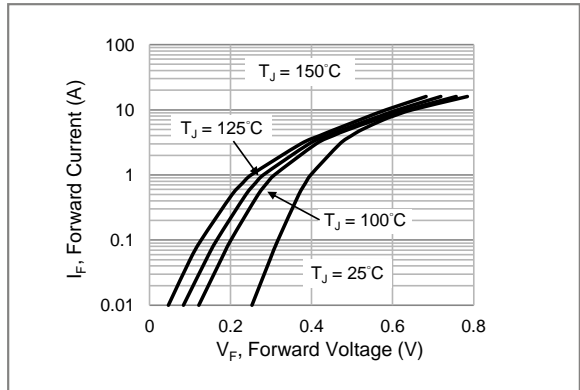


Fig.4 Typical Forward Characteristics

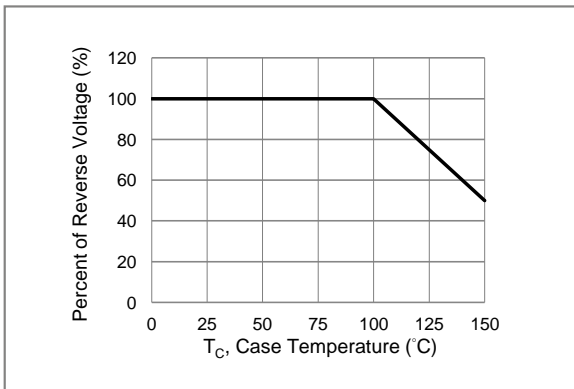


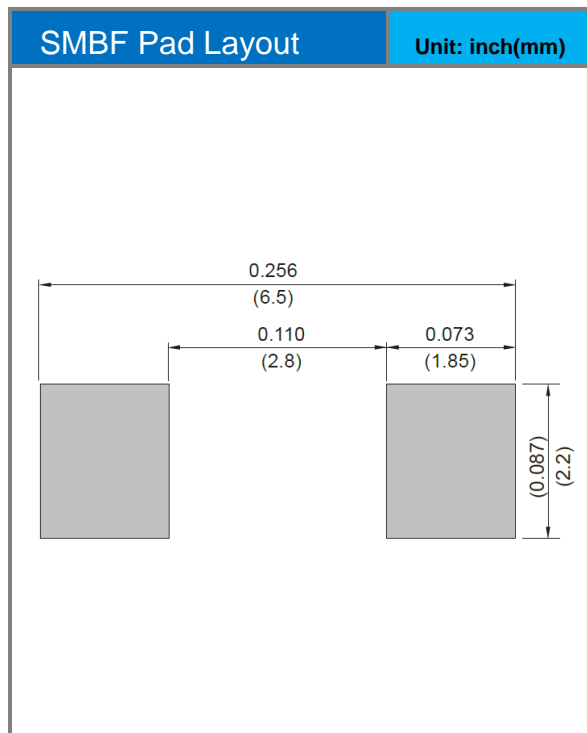
Fig.5 Operating Temperature Derating Curve

SRT8100UF

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
SRT8100UF	SMBF	5K pcs / 13" reel	SRT8100UF

Mounting Pad Layout



SRT8100UF

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