



SR56F-AU

SURFACE MOUNT SCHOTTKY DIODES

Voltage	60 V	Current	5 A
----------------	-------------	----------------	------------

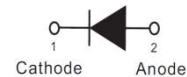
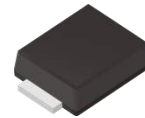
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize
- 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 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

Mechanical Data

- Case: SMBF Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams

SMBF



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	60	V
Maximum Rms Voltage	V _{RMS}	42	V
Maximum Dc Blocking Voltage	V _{DC}	60	V
Maximum Average Forward Current	I _{F(AV)}	5	A
Peak Forward Surge Current : 8.3ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	100	A
Maximum Junction Capacitance Measured at 1 MHZ And Applied V _R = 4 V	C _J	190	pF
Typical Thermal Resistance	R _{θJA} ⁽¹⁾	135	°C/W
	R _{θJC} ⁽²⁾	18	
	R _{θJL} ⁽²⁾	17	
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C



SR56F-AU

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 1\text{ A}, T_J = 25^\circ\text{C}$	-	0.39	-	V
		$I_F = 2\text{ A}, T_J = 25^\circ\text{C}$	-	0.46	-	
		$I_F = 5\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.7	
		$I_F = 1\text{ A}, T_J = 125^\circ\text{C}$	-	0.3	-	
		$I_F = 2\text{ A}, T_J = 125^\circ\text{C}$	-	0.35	-	
		$I_F = 5\text{ A}, T_J = 125^\circ\text{C}$	-	0.57	-	
Reverse Current	$I_R^{(2)}$	$V_R = 48\text{ V}, T_J = 25^\circ\text{C}$	-	13	-	μA
		$V_R = 60\text{ V}, T_J = 25^\circ\text{C}$	-	-	100	μA
		$V_R = 60\text{ V}, T_J = 125^\circ\text{C}$	-	14.5	-	mA

NOTES:

1. Mounted on a FR4 PCB, single-sided copper, mini pad.
2. Short duration pulse test used to minimize self-heating effect



SR56F-AU

TYPICAL CHARACTERISTIC CURVES

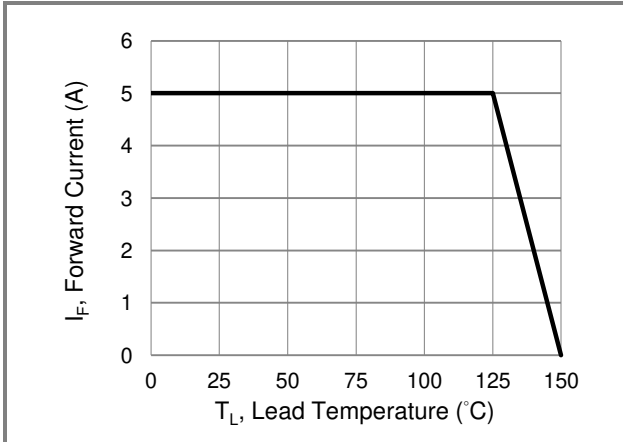


Fig.1 Forward Current Derating Curve

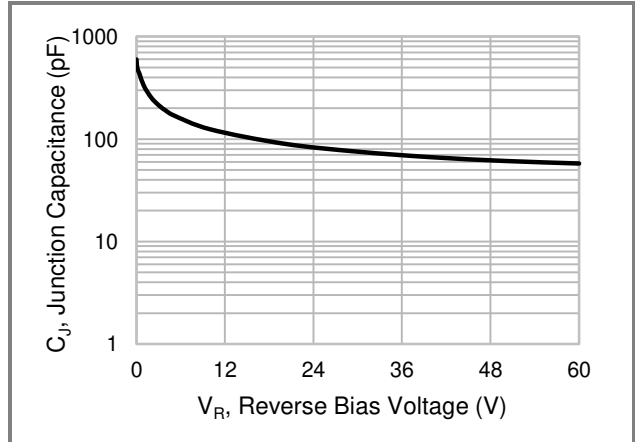


Fig.2 Typical Junction Capacitance

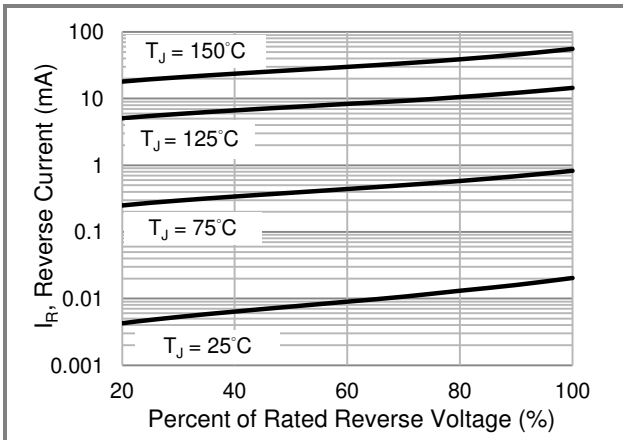


Fig.3 Typical Reverse Characteristics

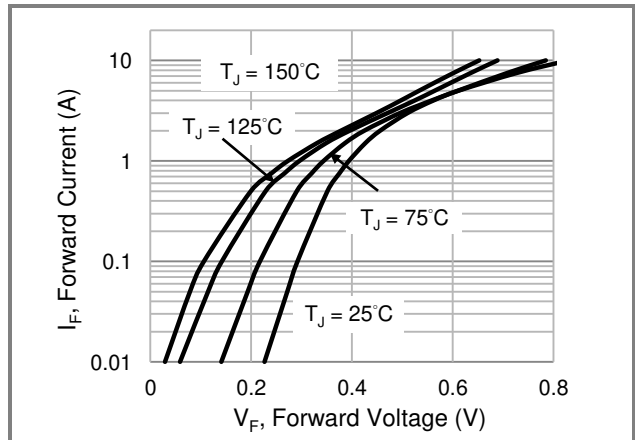


Fig.4 Typical Forward Characteristics

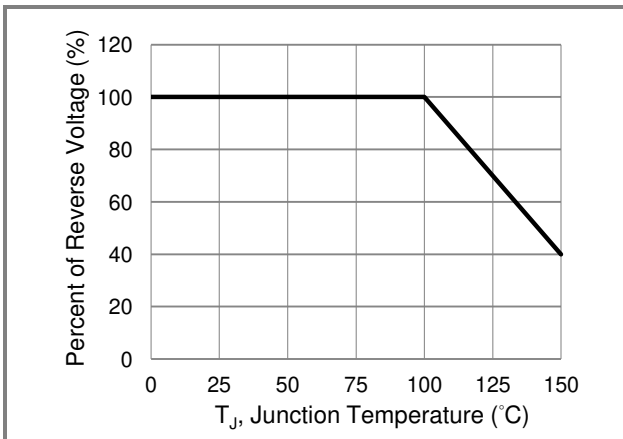


Fig.5 Operating Temperature Derating Curve

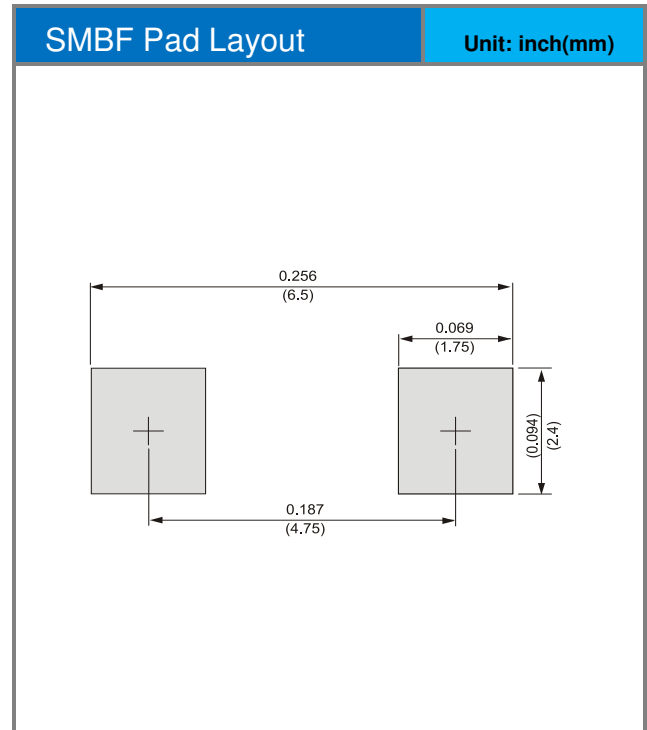
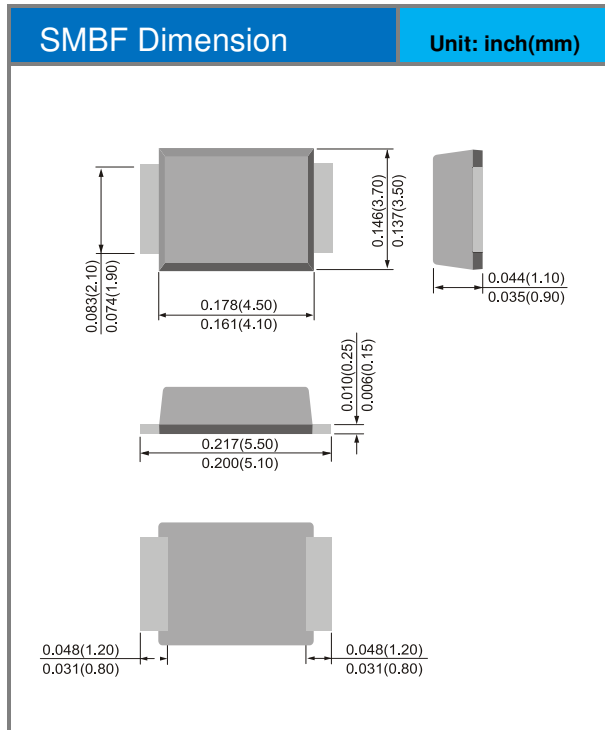


SR56F-AU

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SR56F-AU_R1_000A1	SMBF	5K / 13" Reel	SR56F	Halogen free

Packaging Information & Mounting Pad Layout





SR56F-AU

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 relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, 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.