

Power Schottky Rectifier - 5Amp 40~200Volt

Features

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed
- High reliability
- High surge current capability
- Epitaxial construction
- Lead free device
- Halogen-Free

Mechanical data

- Case : Molded plastic
- Epoxy : UL 94V-0 rate flame retardant
- Terminals : Solder plated, solderable per MIL-STD-750,method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.007 ounce 0.21 grams

Maximum ratings and Electrical characteristics

Parameters	SCR54	SCR56	SCR510	SCR515	SCR520	UNIT
Marking Code	SS54	SS56	S510	S515	S520	
Maximum Recurrent Peak Reverse Voltage	40	60	100	150	200	V
Maximum RMS Voltage	28	42	70	105	140	V
Maximum DC Blocking Voltage	40	60	100	150	200	V
Maximum Average Forward Rectified Current	5					A
Peak Forward Surge Current	100					A
Maximum Instantaneous Forward Voltage at 5A	Tc = 25°C	0.55	0.70	0.85	0.88	V
	Tc = 125°C	0.50	0.60	0.66	0.69	
Maximum Average Reverse Current at Rated DC Blocking Voltage	Tc = 25°C	0.5		0.05		mA
	Tc = 100°C	20		10		
Typical Junction Capacitance	250					pF
Typical Thermal Resistance R _θ JL (Note 1)	17					°C/W
Operating and Storage Temperature Range	-50 to +125		-50 to +150			°C

Note : 1. Mounted on P.C.B with copper pad size 16mm x 16mm

SCR54 ~ SCR520

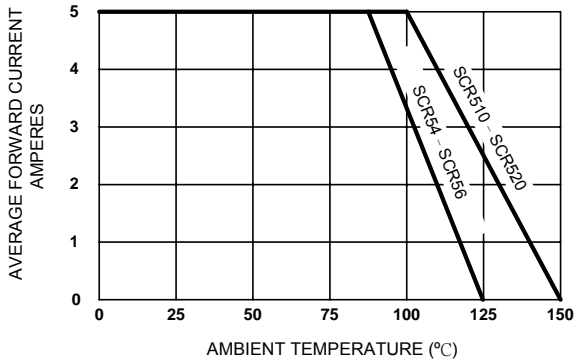


Figure 1. Forward Current Derating Curve

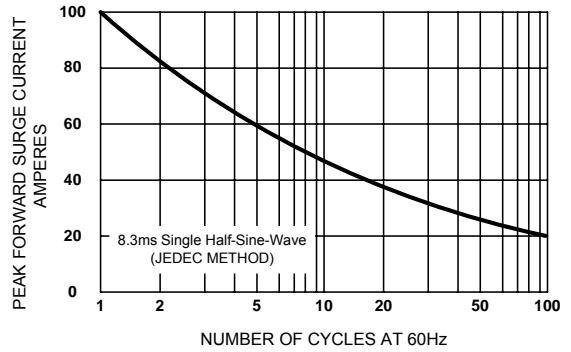


Figure 2. Maximum Non-repetitive Surge Current

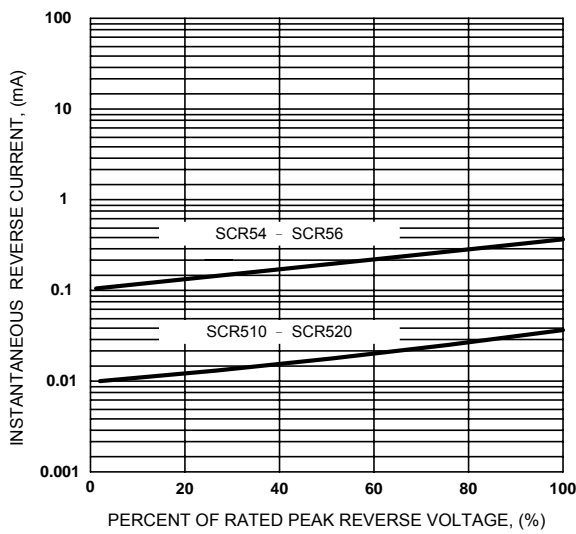


Figure 3. Typical Reverse Characteristics

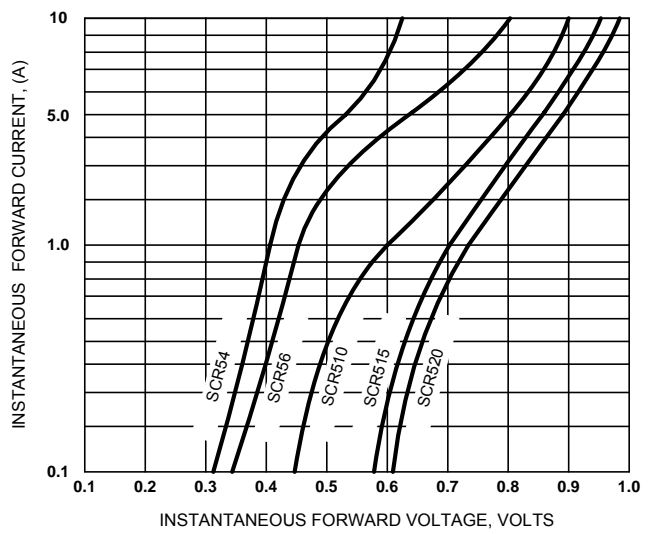


Figure 4. Typical Forward Characteristics

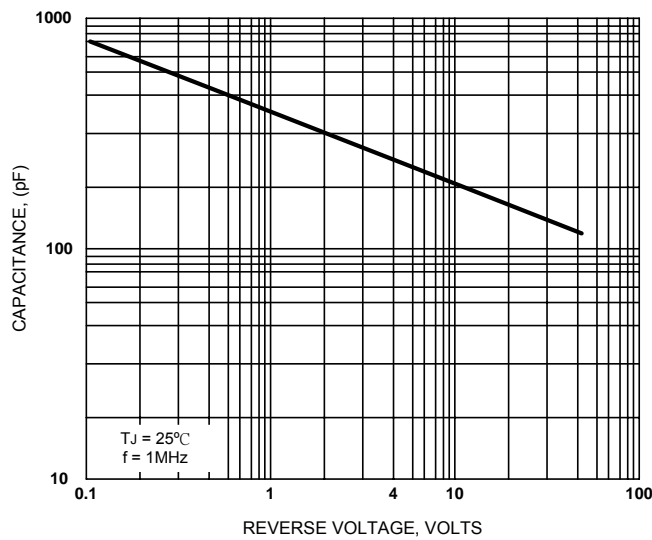
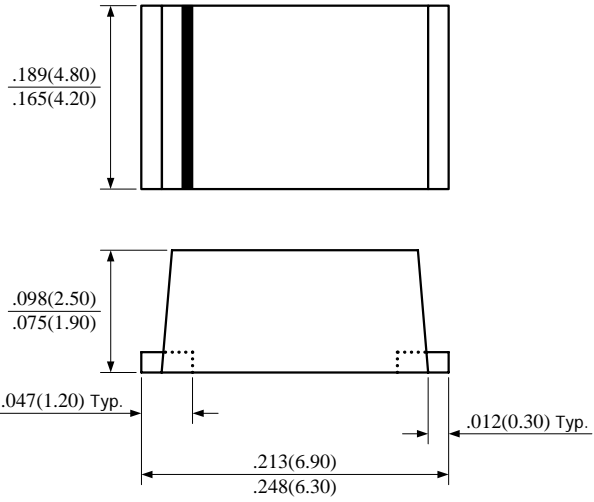


Figure 5. Typical Junction Capacitance

SCR54~SCR520

SMC - FW



UNIT : inch(mm)



IMPORTANT NOTICE:

Sirect and Sirectsemi are registered trademarks of Sirect Semiconductor Incorporated. Sirect reserved the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase and use.

Products described herein may be covered by one or more United States, China, Taiwan or foreign patents pending.

Sirect products are not authorized for use as critical components in life support devices or system without express written approval of Sirect.

Sirect Semiconductor Incorporated does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel. Should customers purchase or use Sirect products for any unintended or unauthorized application, customers shall indemnify and hold Sirect and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.

© Sirect Semiconductor Incorporated