



# SS12~SS16

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**Voltage**

**20~60 V**

**Current**

**1 A**

### Features

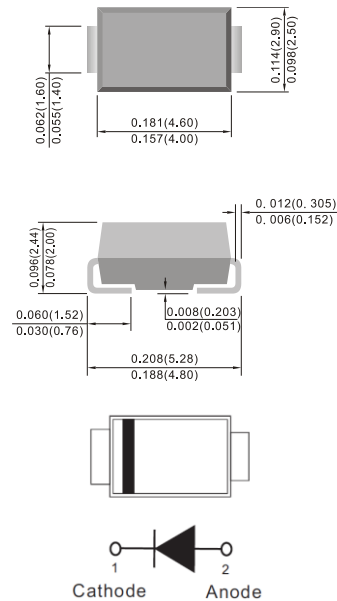
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O.
- For surface mounted applications in order to optimize board space
- Low power loss, High efficiency
- High surge capacity
- High current capacity, low  $V_F$
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive).
- Green molding compound as per IEC61249 Std..(Halogen Free)

### Mechanical Data

- Case: SMA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging : 12mm tape (EIA-481)
- Approx. Weight: 0.0023 ounces, 0.0679 grams

**SMA**

**Unit: inch(mm)**



### Maximum Ratings ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER		SYMBOL	SS12	SS13	SS14	SS15	SS16	UNIT
Maximum repetitive peak reverse voltage		$V_{RRM}$	20	30	40	50	60	V
Maximum rms voltage		$V_{RMS}$	14	21	28	35	42	V
Maximum dc blocking voltage		$V_R$	20	30	40	50	60	V
Maximum average forward current		$I_{F(AV)}$	1					A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		$I_{FSM}$	30					A
Maximum forward voltage at 1A		$V_F$	0.5		0.7			V
Maximum dc reverse current at rated dc blocking voltage (Note 1)	$T_J=25^{\circ}\text{C}$	$I_R$	0.2		0.1			mA
	$T_J=100^{\circ}\text{C}$		6		5			
Typical Junction Capacitance ( $V_R=4\text{V}$ $f=1\text{MHZ}$ )		$C_J$	70		50			pF
Typical thermal resistance	(Note 2)	$R_{\theta JL}$	28					$^{\circ}\text{C/W}$
	(Note 2)	$R_{\theta JA}$	88					
	(Note 3)	$R_{\theta JA}$	150					
Operating junction temperature range		$T_J$	-55 to +125		-55 to +150			$^{\circ}\text{C}$
Storage temperature range		$T_{STG}$	-55 to +150					$^{\circ}\text{C}$

Note : 1. Short duration pulse test used to minimize self-heating effect.

2. Mounted on a FR4 PCB, single-sided copper, with  $100\text{cm}^2$  copper pad area

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



# SS12~SS16

## TYPICAL CHARACTERISTIC CURVES

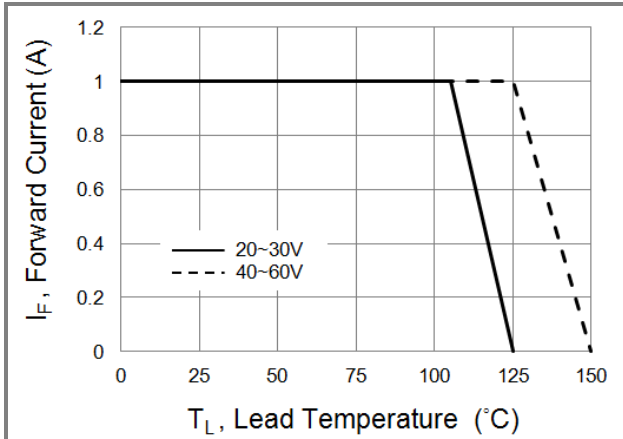


Fig.1 Forward Current Derating Curve

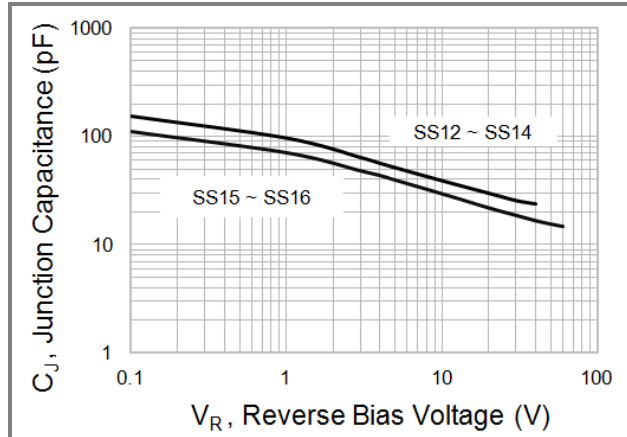


Fig.2 Typical Junction Capacitance

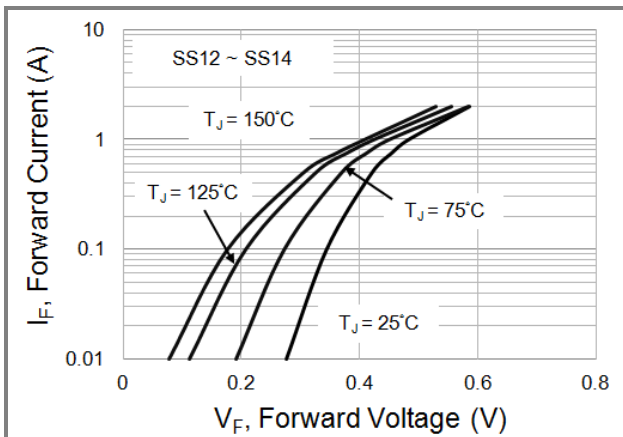


Fig.3 Typical Forward Characteristics

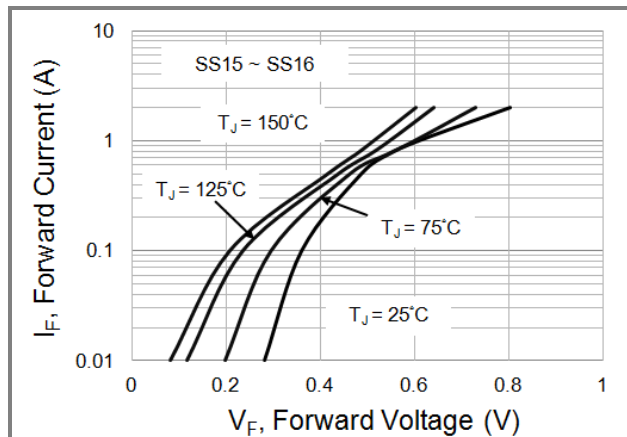


Fig.4 Typical Forward Characteristics

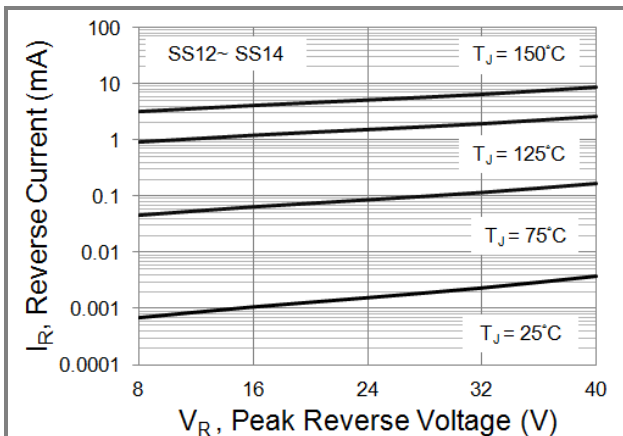


Fig.5 Typical Reverse Characteristics

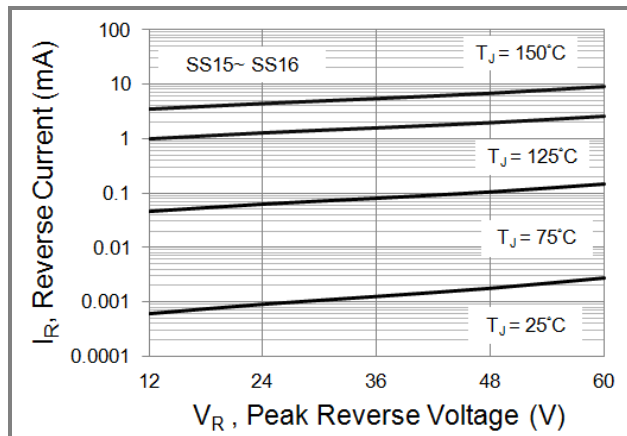


Fig.6 Typical Reverse Characteristics



## SS12~SS16

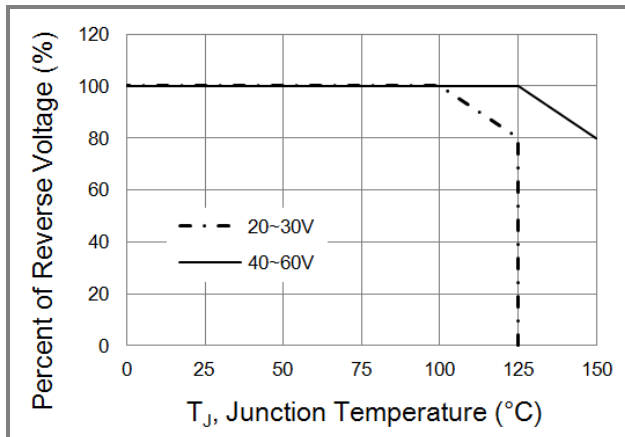


Fig.7 Operating Temperature Derating Curve



# SS12~SS16

## Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SS12_R1_00001	SMA	1,800pcs / 7" reel	SS12	Halogen free
SS12_R2_00001	SMA	7,500pcs / 13" reel	SS12	Halogen free

## Mounting Pad Layout

**SMA / DO-214AC** Unit : inch(mm)





## SS12~SS16

### 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 requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, 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.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Panjit\(强茂\)](#)