



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Voltage

20~60 V

Current

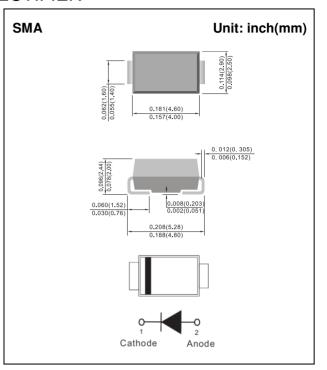
1 A

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



Maximum Ratings (T_A=25°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			1					Α
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	30				Α	
Maximum forward voltage at 1A		V _F	0.5 0.7			.7	V	
Maximum dc reverse current at rated dc blocking voltage (Note 1)	T _J =25 °C	I _R	0.2			0.1 5		mA
	T _J =100 °C		6					
Typical Junction Capacitance (V _R =4V f=1MHZ)		CJ		70	50		60	pF
	(Note 2)	R _{0JL}	28					
Typical thermal resistance	(Note 2)	$R_{\theta JA}$	88				°C/W	
	(Note 3)	R _{θJA}	150					
Operating junction temperature range		T _J	-55 to +125 -55 to +150		0	°C		
Storage temperature range		T _{STG}	-55 to +150			°C		

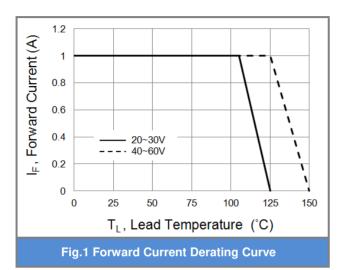
Note: 1. Short duration pulse test used to minimize self-heating effect.

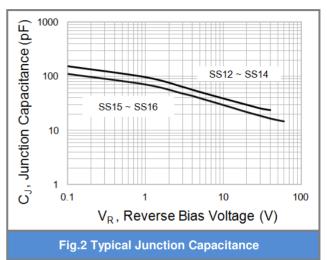
- 2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area
- 3. Mounted on a FR4 PCB, single-sided copper, mini pad.

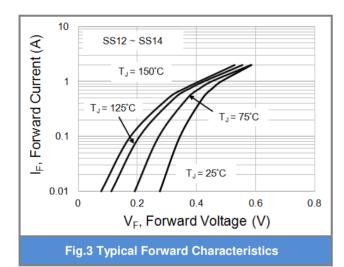


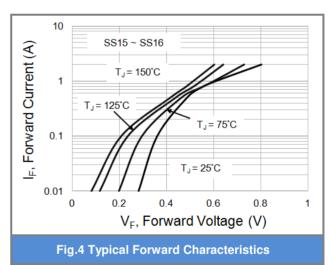


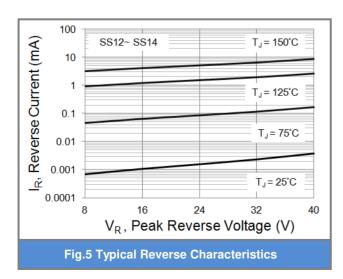
TYPICAL CHARACTERISTIC CURVES

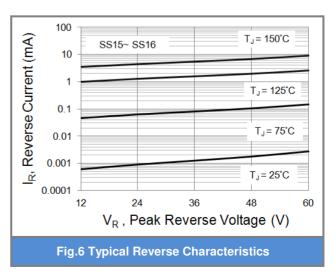
















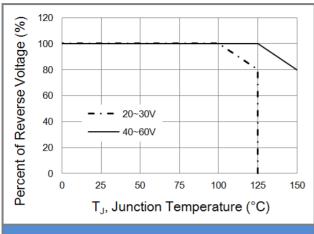


Fig.7 Operating Temperature Derating Curve

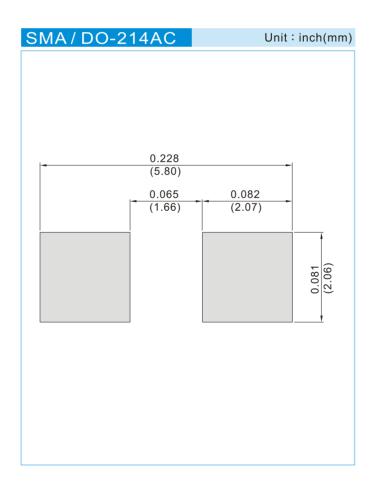




Part No Packing Code Version

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







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