

## SURFACE MOUNT SILICON RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V CURRENT: 1.0 A

## **Features**

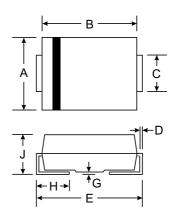
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O

## **Mechanical Data**

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)







SMA(DO-214AC)								
3IVIA(DO-214AC)								
Dim	Min	Max						
Α	2.29	2.92						
В	4.00	4.60						
C	1.27	1.63						
D	0.15	0.31						
E	4.80	5.59						
G	0.10	0.20						
H	0.76	1.52						
7	2.01	2.62						
All Dimensions in mm								

## Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

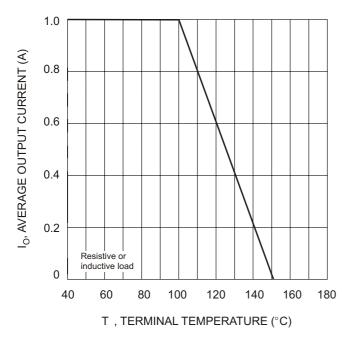
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

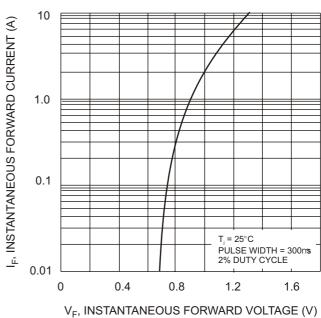
Characteristic	Symbol	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current @T <sub>L</sub> = 100°C	lo	1.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30				А			
Forward Voltage @I <sub>F</sub> = 1.0A	VFM	1.10						V	
	IRM	5.0 200						μA	
Reverse Recovery Time (Note 1)	trr				2.5				μS
Typical Junction Capacitance (Note 2)	Cj				15				pF
Typical Thermal Resistance (Note 3)	RθJL				30				K/W
Operating and Storage Temperature Range	Тj, Tsтg	-65 to +175					°C		

Note: 1. Measured with  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{rr} = 0.25A$ ,

- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
- 3. Mounted on P.C. Board with 8.0mm<sup>2</sup> land area.







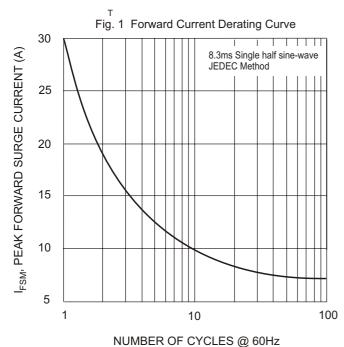


Fig. 3 Typical Forward Characteristics

