

S3AA - S3MA SURFACE MOUNT RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V CURRENT: 3.0 A

Features

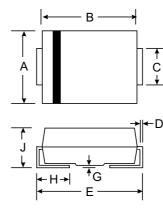
- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O

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)							
Dim	Min	Max					
Α	2.29	2.92					
В	4.00	4.60					
С	1.27	1.63					
D	0.15	0.31					
Е	4.80	5.59					
G	0.10	0.20					
н	0.76	1.52					
J	2.01	2.62					
All Dimensions in mm							

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

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

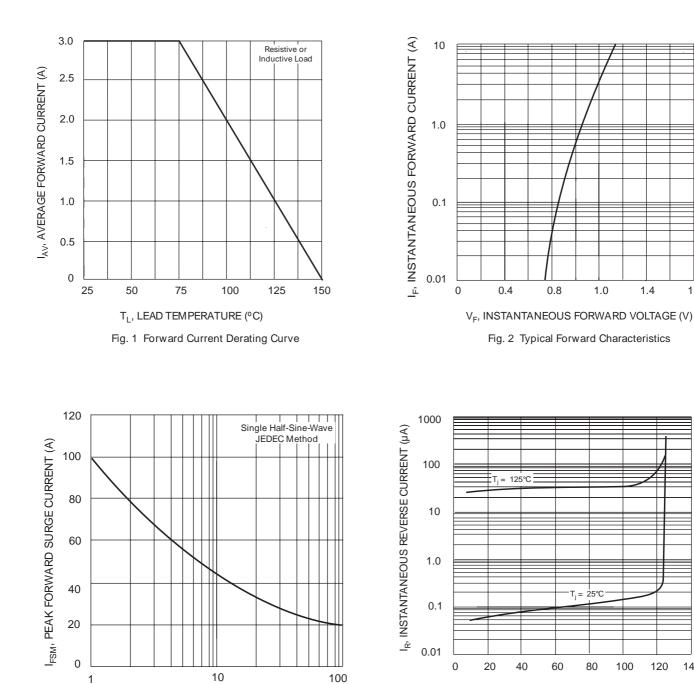
Characteristic		Symbol	S3AA	S3BA	S3DA	S3GA	S3JA	S3KA	S3MA	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		Vrrm Vrwm Vr	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current	@T _L = 75°C	lo	3.0						А	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	100							A
Forward Voltage	@I _F = 3.0A	Vfm	1.20						V	
Peak Reverse Current At Rated DC Blocking Voltage	@T _A = 25°C @T _A = 125°C	Irm	5.0 250						μA	
Reverse Recovery Time (Note 1)		trr				2.5				μS
Typical Junction Capacitance (No	te 2)	Cj				60				pF
Typical Thermal Resistance (Note	e 3)	$R_{ heta}JL$				13				°C/W
Operating and Storage Temperati	ure Range	Тj, Tsтg	-65 to +150							°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 8.0mm² land area.





PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 4 Typical Reverse Characteristics

1.8

140

NUMBER OF CYCLES AT 60 Hz

Fig. 3 Forward Surge Current Derating Curve