

S3A - S3M 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: SMC/DO-214AB, Molded Plastic
 Terminals: Solder Plated, Solderable

per MIL-STD-750, Method 2026

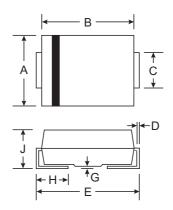
Polarity: Cathode Band or Cathode Notch

Marking: Type Number

Weight: 0.21 grams (approx.)







SMC/DO-214AB							
Dim	Min Max						
Α	5.59	6.22					
В	6.60	7.11					
С	2.75	3.18					
D	0.15	0.31					
E	7.75	8.13					
G	0.10	0.20					
Н	0.76	1.52					
J	2.00	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	S3A	S3B	S3D	S3G	S3J	S3K	S3M	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	٧
Average Rectified Output Current	lo	3.0							Α	
Non-Repetitive Peak Forward Su 8.3ms Single half sine-wave super rated load (JEDEC Method)	•	IFSM	100					А		
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						μΑ	
Reverse Recovery Time (Note 1)		trr				2.5				μS
Typical Junction Capacitance (Note 2)		Cj	60							pF
Typical Thermal Resistance (Note 3)		$R_{ heta}_{JL}$	13							°C/W
Operating and Storage Temperature 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.



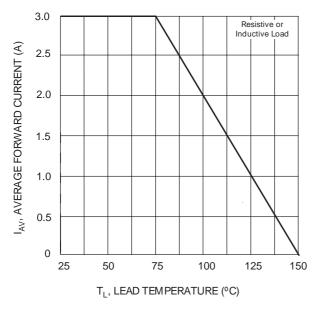


Fig. 1 Forward Current Derating Curve

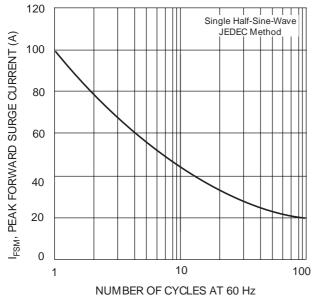


Fig. 3 Forward Surge Current Derating Curve

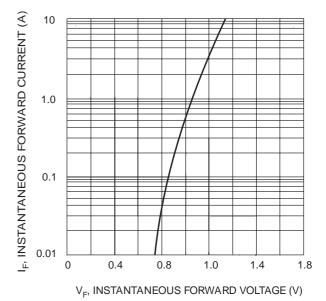


Fig. 2 Typical Forward Characteristics

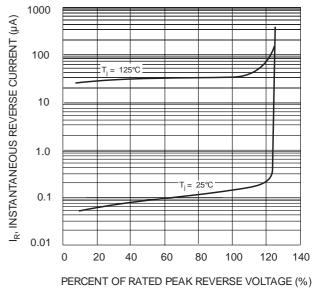


Fig. 4 Typical Reverse Characteristics