

SURFACE MOUNT RECTIFIER DIODE

VOLTAGE RANGE: 50 - 1000V

CURRENT: 3.0 A

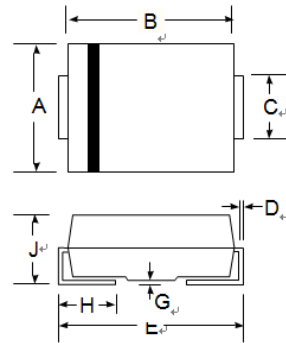
Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- 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 [∘]	Mi [∘]	Max [∘]
A [∘]	2.29 [∘]	2.92 [∘]
B [∘]	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 [∘]
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	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _L = 75°C	I _O	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on	I _{FSM}	100							A
Forward Voltage @I _F = 3.0A	V _{FM}	1.20							V
Peak Reverse Current @T _A = 25°C	I _{RM}	5.0							μA
At Rated DC Blocking Voltage @T _A = 125°C		250							
Reverse Recovery Time (Note 1)	t _{rr}	2.5							μS
Typical Junction Capacitance (Note 2)	C _j	60							pF
Typical Thermal Resistance (Note 3)	R _{JL}	13							°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C

- Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_r = 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.

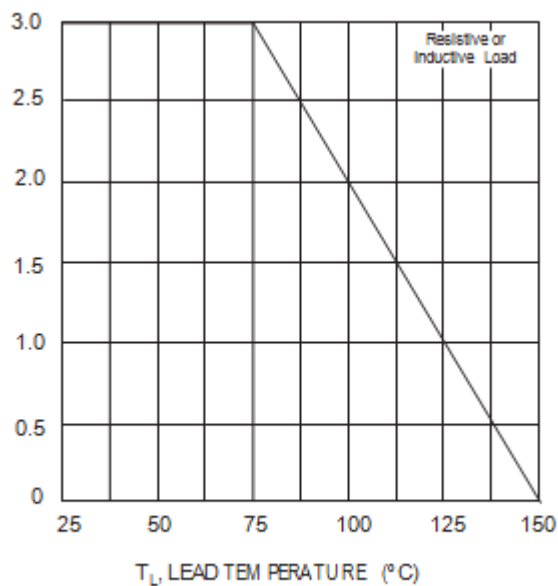


Fig. 1 Forward Current Derating Curve

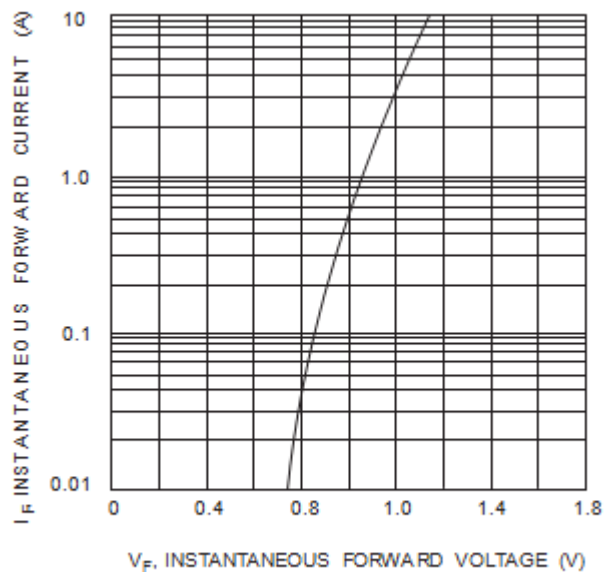


Fig. 2 Typical Forward Characteristics

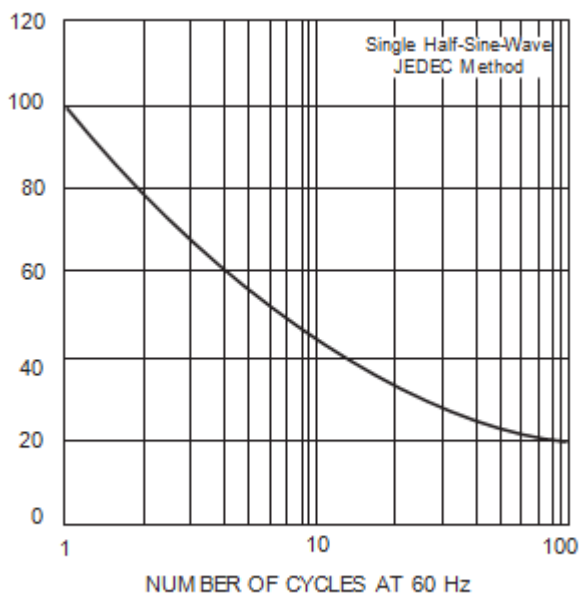


Fig. 3 Forward Surge Current Derating Curve

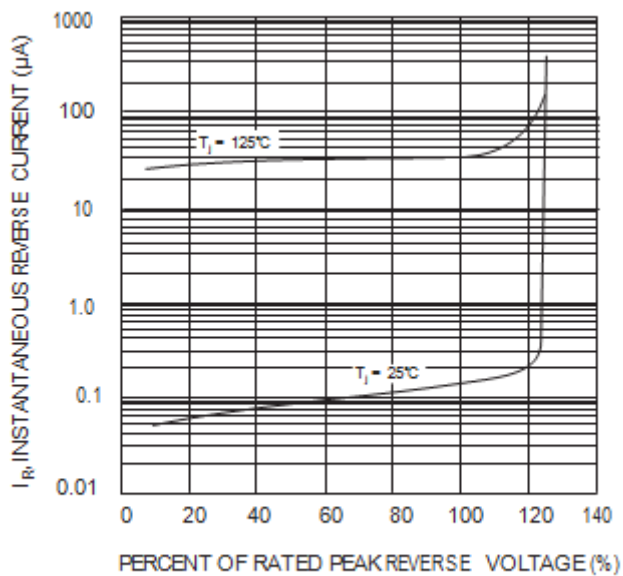


Fig. 4 Typical Reverse Characteristics