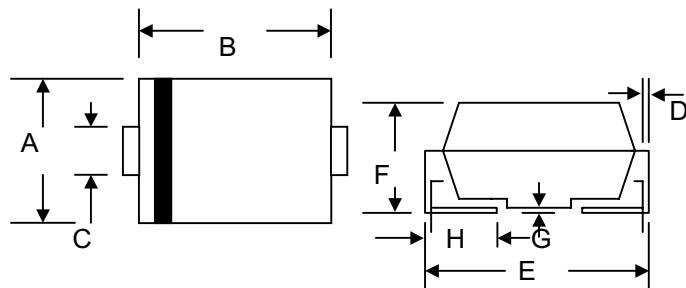


## Data Sheet 2561 Rev.—

## Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Surge Overload Rating to 100A Peak
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O



## Mechanical Data

- Case: 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
A	0.220(5.59)	0.245(6.22)
B	0.260(6.60)	0.280(7.11)
C	0.108(2.75)	0.128(3.25)
D	0.006(0.15)	0.012(0.31)
E	0.305(7.75)	0.320(8.13)
F	0.079 (2.00)	0.103(2.62)
G	0.002(0.05)	0.008(0.20)
H	0.030(0.76)	0.050(1.27)

All Dimensions in inch( mm)

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$  unless otherwise specified

Characteristic	Symbol	S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$	I <sub>o</sub>				3.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>					100			A
Forward Voltage @ $I_F = 3.0\text{A}$	V <sub>FM</sub>				1.20				V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I <sub>RM</sub>				5.0				μA
Reverse Recovery Time (Note 1)	t <sub>rr</sub>				2.5				μS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>				60				pF
Typical Thermal Resistance (Note 3)	R <sub>θ JL</sub>				13				K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>				-65 to +150				°C

Note: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 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.

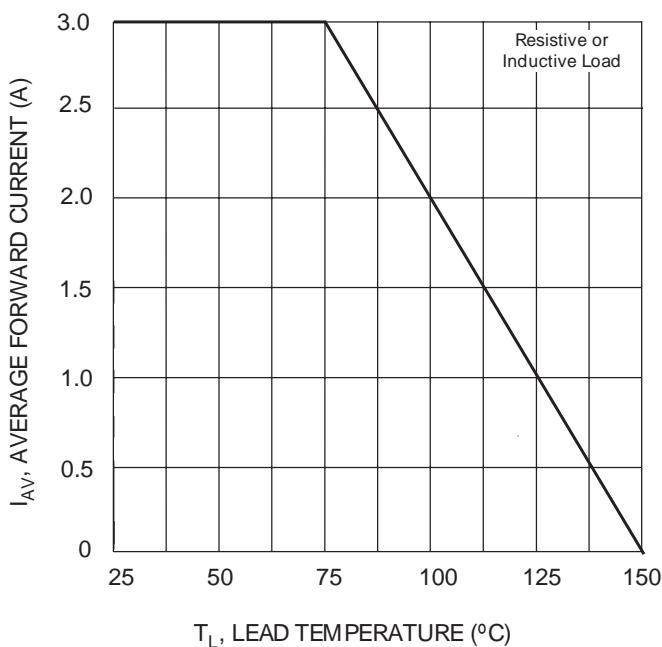


Fig. 1 Forward Current Derating Curve

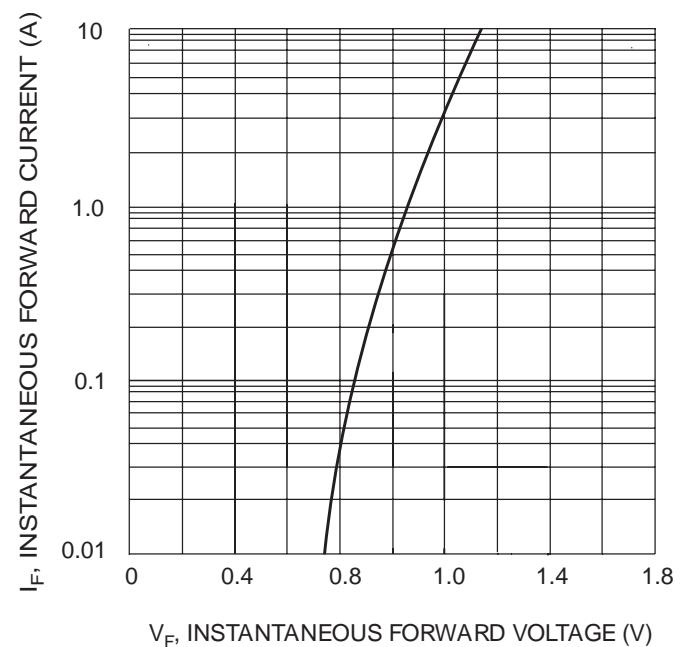


Fig. 2 Typical Forward Characteristics

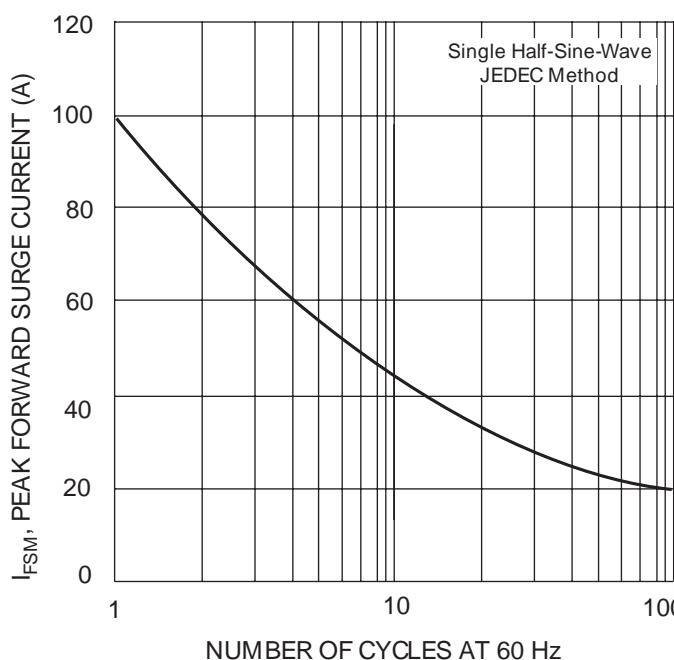


Fig. 3 Forward Surge Current Derating Curve

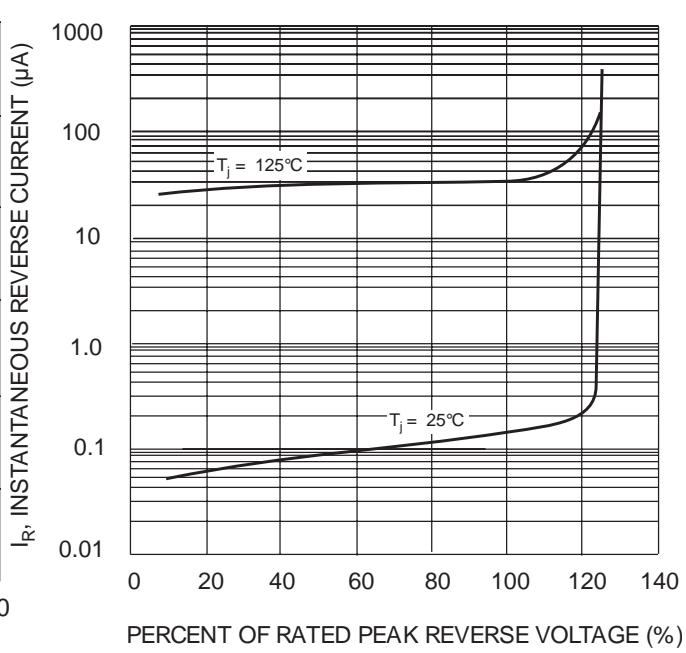


Fig. 4 Typical Reverse Characteristics