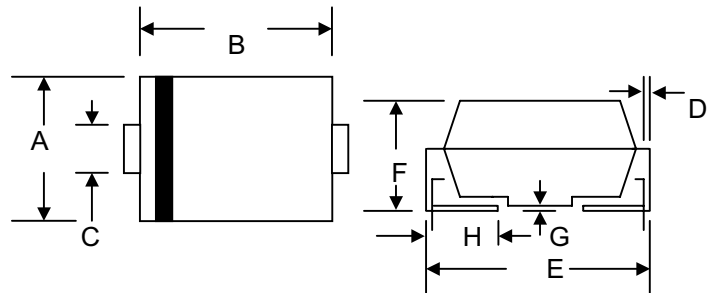


**Data Sheet 2556 Rev.—**

**Features**

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O



**Mechanical Data**

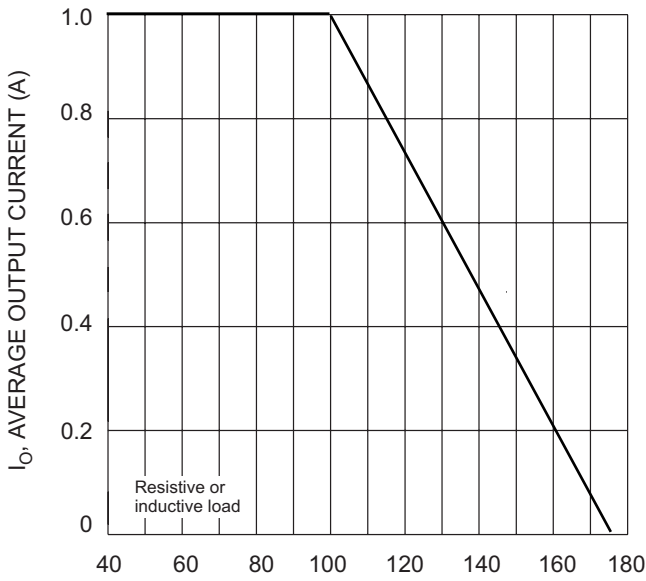
- Case: Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

SMA/DO-214AC		
Dim	Min	Max
A	0.098(2.50)	0.114(2.90)
B	0.157(4.00)	0.181(4.60)
C	0.055(1.40)	0.063(1.60)
D	0.006(0.15)	0.012(0.31)
E	0.189(4.80)	0.208(5.28)
F	0.079(2.00)	0.096(2.44)
G	0.002(0.05)	0.008(0.20)
H	0.030(0.76)	0.060(1.52)
All Dimensions in inch(mm)		

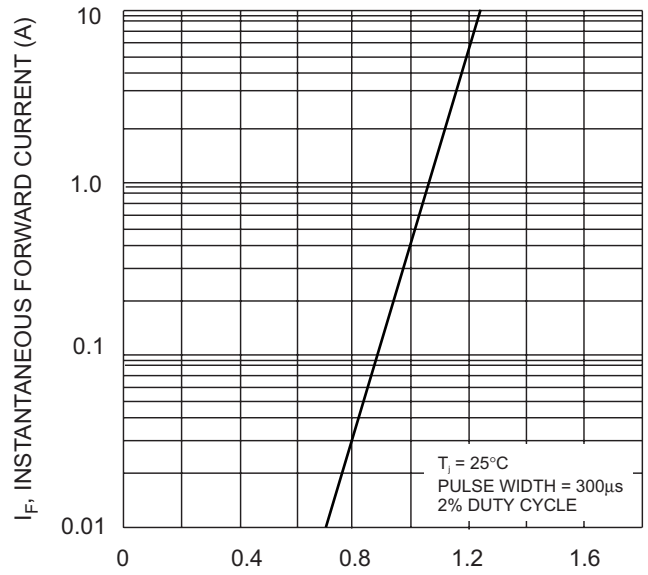
**Maximum Ratings and Electrical Characteristics @<sub>T<sub>A</sub></sub>=25°C unless otherwise specified**

Characteristic	Symbol	M1	M2	M3	M4	M5	M6	M7	Unit	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>									
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	200	400	600	800	1000	V	
DC Blocking Voltage	V <sub>R</sub>									
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V	
Average Rectified Output Current @ <sub>T<sub>L</sub></sub> = 100°C	I <sub>o</sub>	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30								A
Forward Voltage @ <sub>I<sub>F</sub></sub> = 1.0A	V <sub>FM</sub>	1.10								V
Peak Reverse Current @ <sub>T<sub>A</sub></sub> = 25°C At Rated DC Blocking Voltage @ <sub>T<sub>A</sub></sub> = 125°C	I <sub>RM</sub>	5.0 200								μA
Reverse Recovery Time (Note 1)	t <sub>rr</sub>	2.5								μS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	15								pF
Typical Thermal Resistance (Note 3)	R <sub>θJL</sub>	30								K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +175								°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.



$T_L$ , LEAD TEMPERATURE ( $^{\circ}\text{C}$ )  
Fig. 1 Forward Current Derating Curve



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics

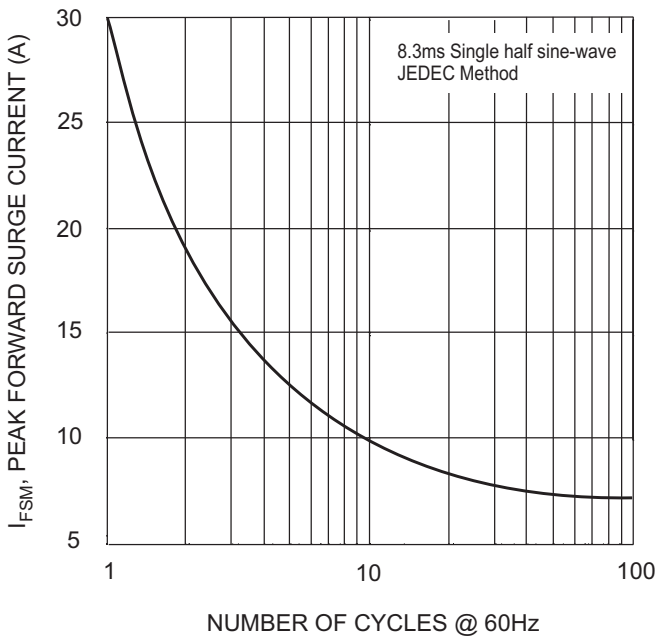


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

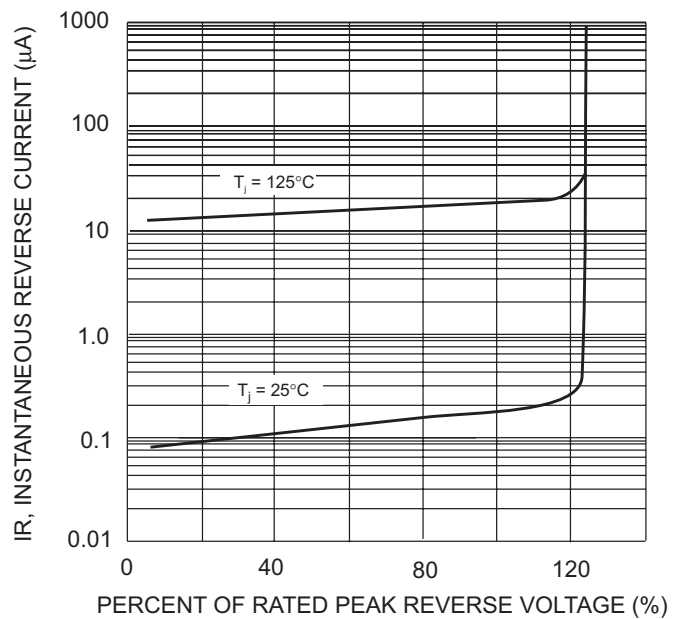


Fig. 4 Typical Reverse Characteristics