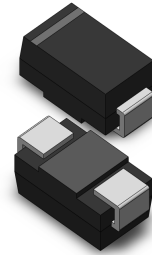


**VOLTAGE RANGE: 100 - 200V**  
**CURRENT: 1.0 A**

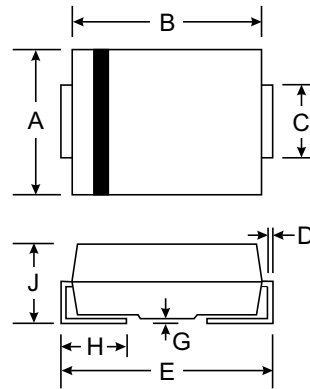
### Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Ultrafast recovery times for high efficiency
- Low forward voltage, low power loss



### Mechanical Data

- Case: SMA(DO-214AC)Molded Plastic
- Case Material - UL Flammability Rating Classification 94V-0
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Approx. Weight: SMA 0.064 grams



SMA(DO-214AC)		
Dim	Min	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<sub>A</sub> = 25°C unless otherwise specified

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

Characteristic	Symbol	ESH1B	ESH1C	ESH1D	Unit
	Marking	EHB	EHC	EHD	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>VRWM</sub> V <sub>R</sub>	100	150	200	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	105	140	V
Average Rectified Output Current @T <sub>L</sub> = 120°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>	50			A
Forward Voltage @I <sub>F</sub> = 1.0A	V <sub>FM</sub>	0.90			V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>	1.0 25			μA
Reverse Recovery Time (Note 1)	t <sub>rr</sub>	25			nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	25			pF
Typical Thermal Resistance (Note 3)	R <sub>θJL</sub>	30			°C/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. See figure 5.  
 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.

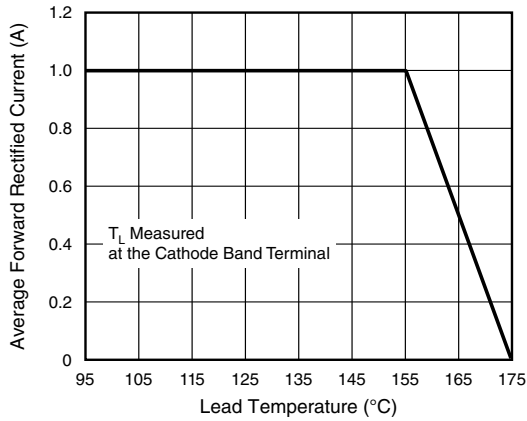
**RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)


Figure 1. Maximum Forward Current Derating Curve

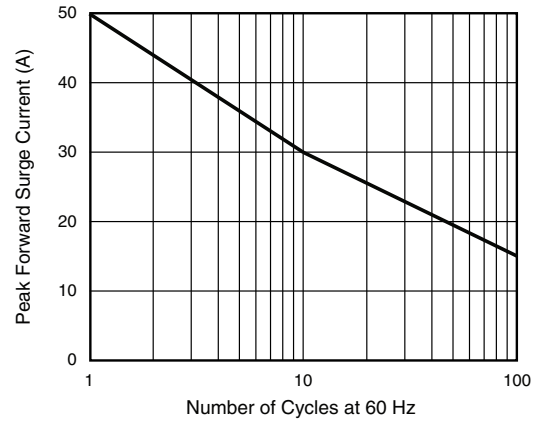


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

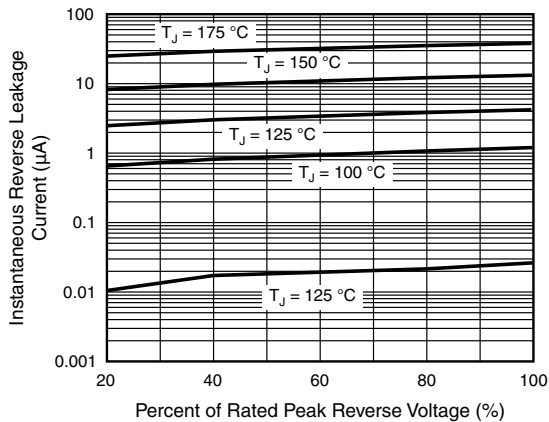


Figure 3. Typical Reverse Leakage Characteristics

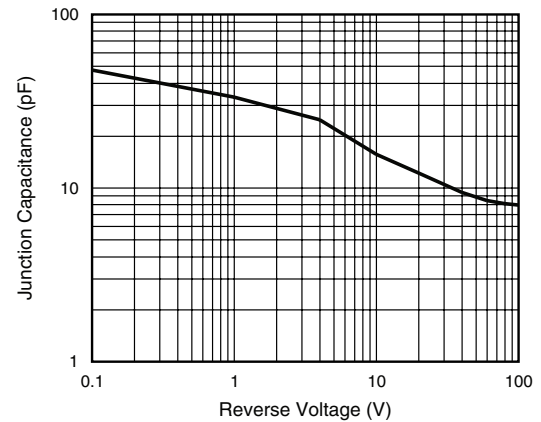


Figure 5. Typical Junction Capacitance

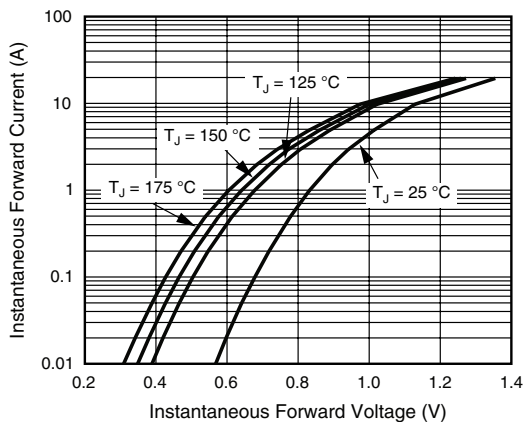


Figure 4. Typical Instantaneous Forward Characteristics

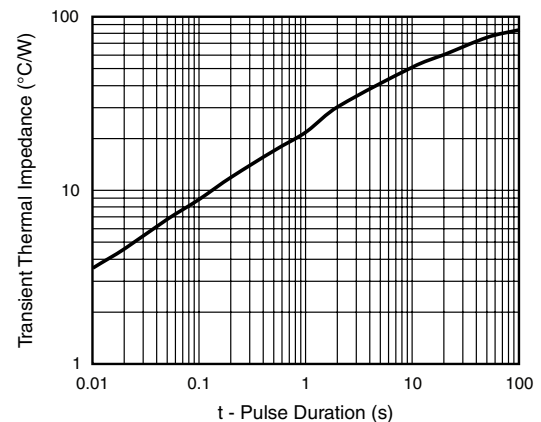


Figure 6. Typical Transient Thermal Impedance