

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

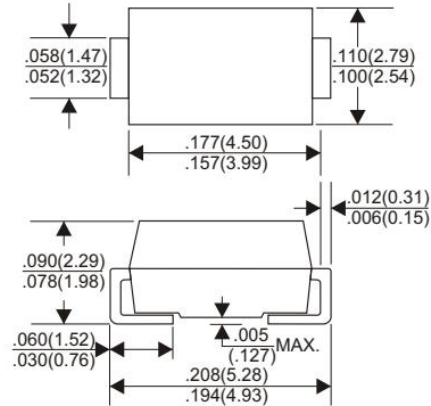
### FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

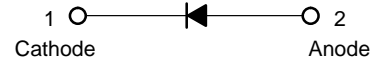
### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.063 grams

DO-214AC(SMA)



Dimensions in inches and (millimeters)



### MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
Average Rectified Forward Current (At Rated $V_R$ , $T_L = 100^\circ\text{C}$ )	$I_O$	3.0	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60 Hz)	$I_{FSM}$	80	A
Storage Temperature	$T_{stg}$	-65 to +150	$^\circ\text{C}$
Operating Junction Temperature	$T_J$	-65 to +125	$^\circ\text{C}$
Voltage Rate of Change (Rated $V_R$ , $T_J = 25^\circ\text{C}$ )	dv/dt	10,000	V/ $\mu\text{s}$

### MARKING DIAGRAM



### ORDERING INFORMATION

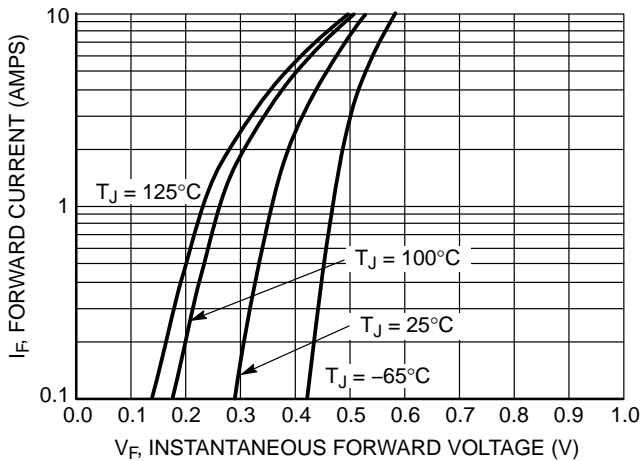
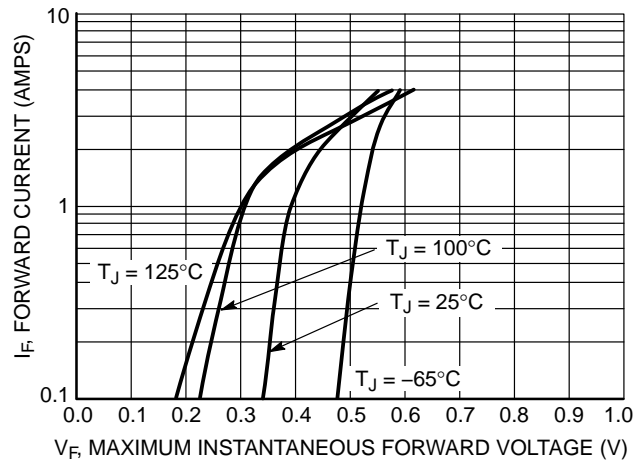
Device	Package	Shipping
SS34	SMA (Pb-Free)	2000 / Tape & Reel

**THERMAL CHARACTERISTICS**

Characteristic	Symbol	Value	Unit
Thermal Resistance – Junction–to–Lead (Note 1)	$R_{\theta JL}$	15	$^{\circ}\text{C/W}$
Thermal Resistance – Junction–to–Ambient (Note 1)	$R_{\theta JA}$	80	

**ELECTRICAL CHARACTERISTICS**

Maximum Instantaneous Forward Voltage (Note 2)	( $I_F = 3.0 \text{ A}$ , $T_J = 25^{\circ}\text{C}$ )	$V_F$	0.50	Volts
Maximum Instantaneous Reverse Current (Note 2)	(V <sub>R</sub> = 20 V)	$I_R$	$T_J = 25^{\circ}\text{C}$	mA
			$T_J = 100^{\circ}\text{C}$	
			2.0	20

**TYPICAL CHARACTERISTICS**

**Figure 1. Typical Forward Voltage**

**Figure 2. Maximum Forward Voltage**

TYPICAL CHARACTERISTICS

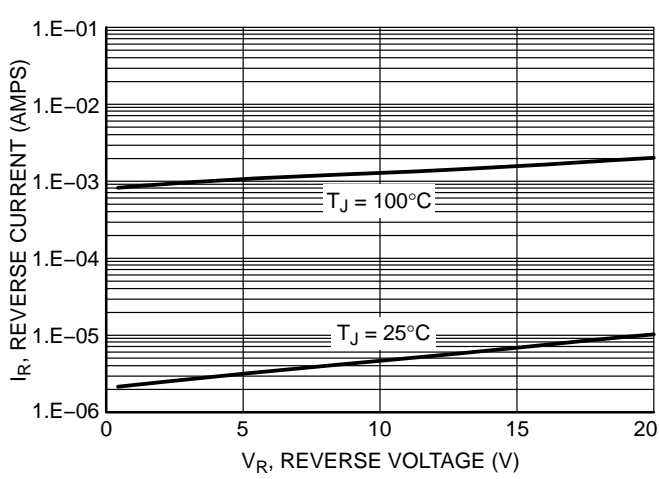


Figure 3. Typical Reverse Current

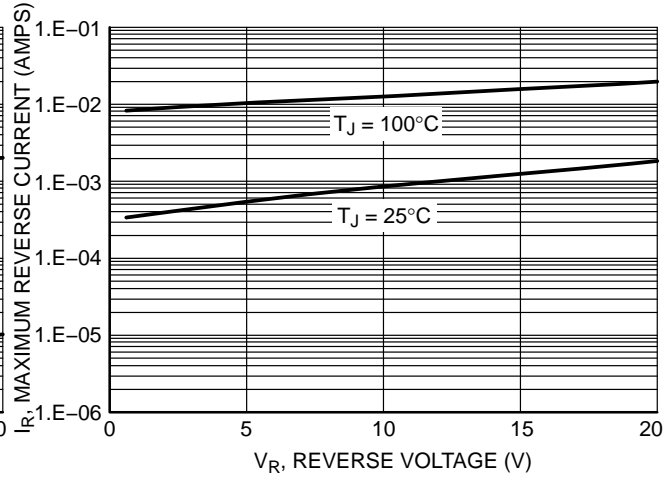


Figure 4. Maximum Reverse Current

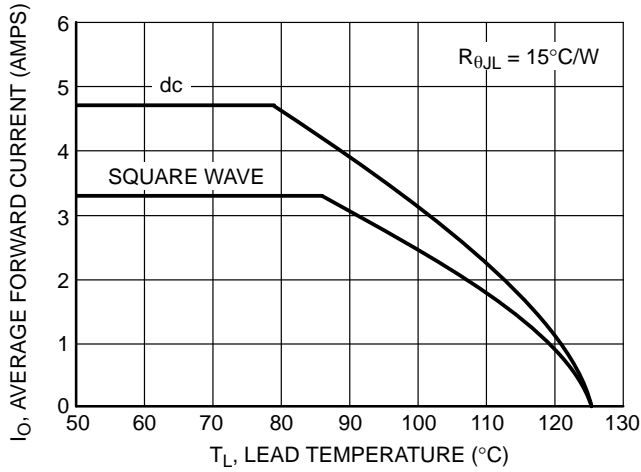


Figure 5. Current Derating

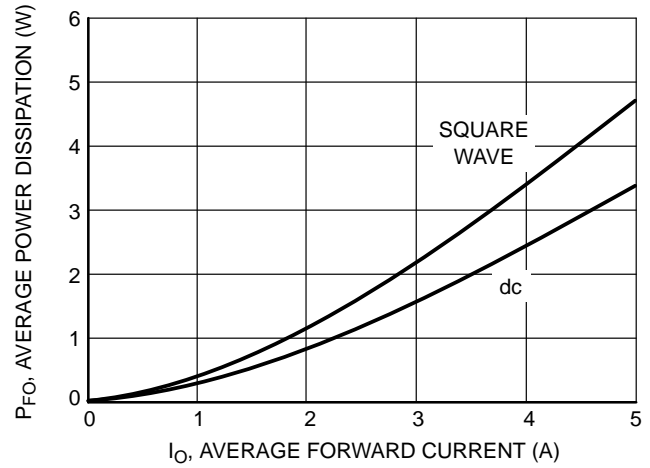


Figure 6. Forward Power Dissipation

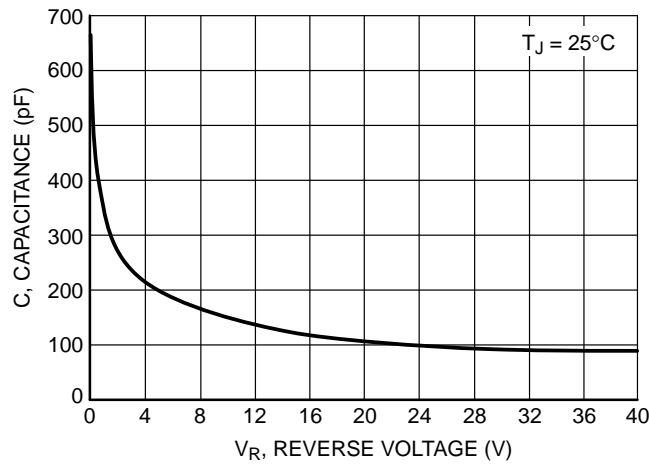


Figure 7. Typical Capacitance

TYPICAL CHARACTERISTICS

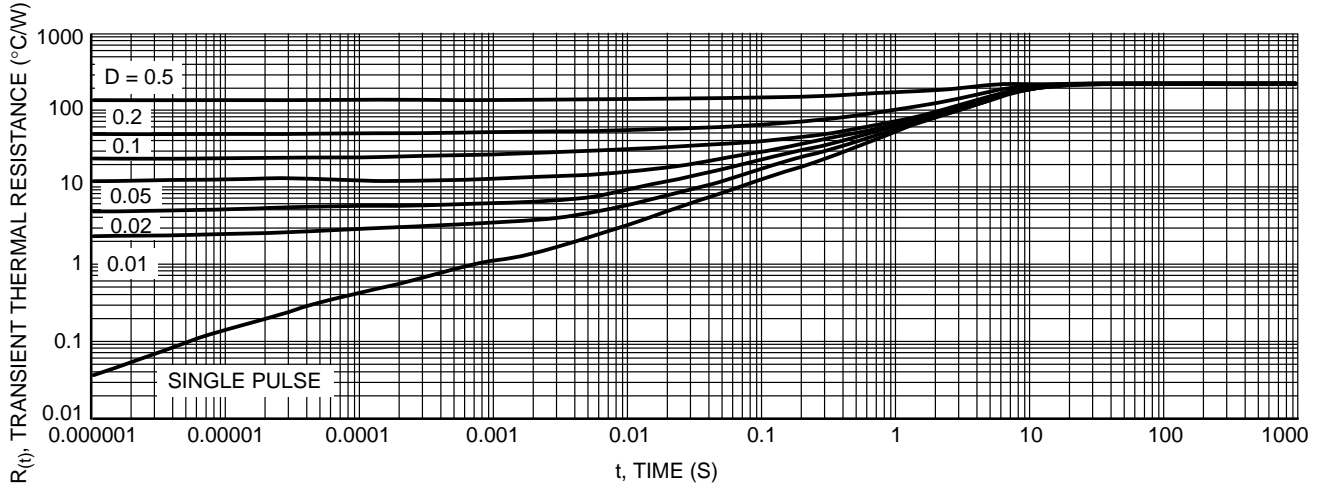


Figure 8. Thermal Response, Junction-to-Ambient (min pad)

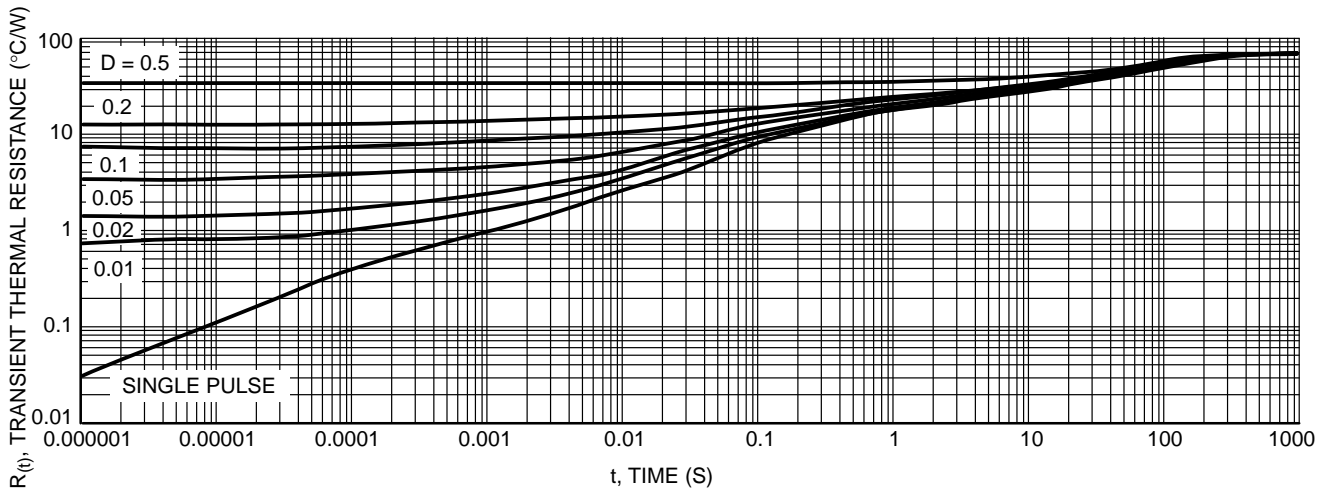


Figure 9. Thermal Response, Junction to Ambient (1 inch pad)