

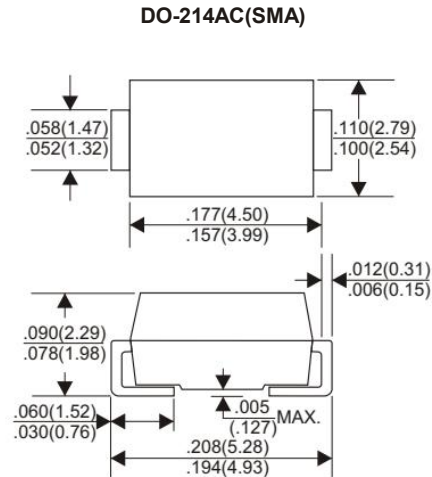
## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### FEATURES

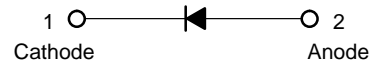
- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

### MECHANICAL DATA

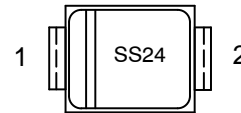
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.063 grams



Dimensions in inches and (millimeters)



### MARKING DIAGRAM



### ORDERING INFORMATION

Device	Package	Shipping
SS24	SMA (Pb-Free)	2000 / Tape & Reel

**MAXIMUM RATINGS**

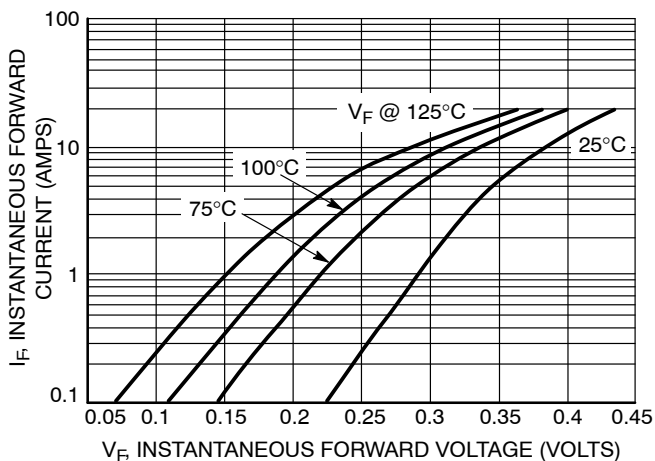
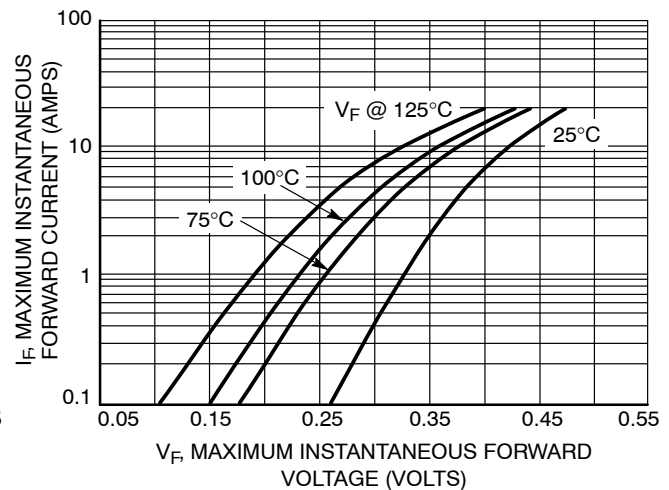
Rating	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	10	V
Average Rectified Forward Current (At Rated $V_R$ , $T_L = 110^\circ\text{C}$ )	$I_O$	2.0	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60 Hz)	$I_{FSM}$	160	A
Storage/Operating Case Temperature Operating Junction Temperature	$T_{stg}$ , $T_C$ $T_J$	-55 to +125	$^\circ\text{C}$
Voltage Rate of Change (Rated $V_R$ , $T_J = 25^\circ\text{C}$ )	dv/dt	10,000	V/ $\mu\text{s}$

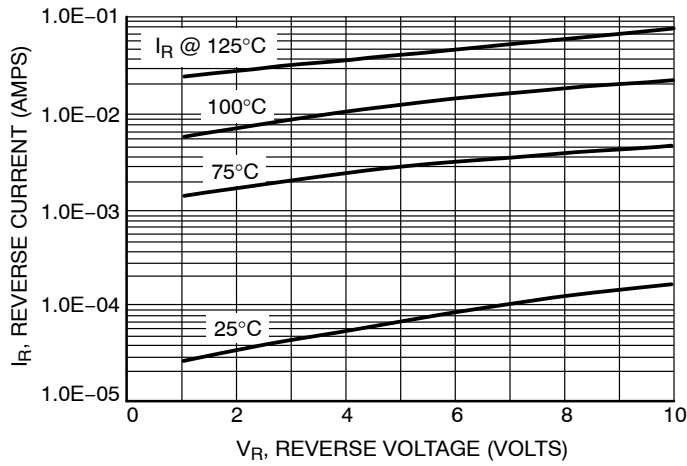
**THERMAL CHARACTERISTICS**

Characteristic	Symbol	Min Pad	1 Inch Pad	Unit
Thermal Resistance, Junction-to-Lead Thermal Resistance, Junction-to-Ambient	$R_{\theta JL}$ $R_{\theta JA}$	22 150	15 81	$^\circ\text{C}/\text{W}$

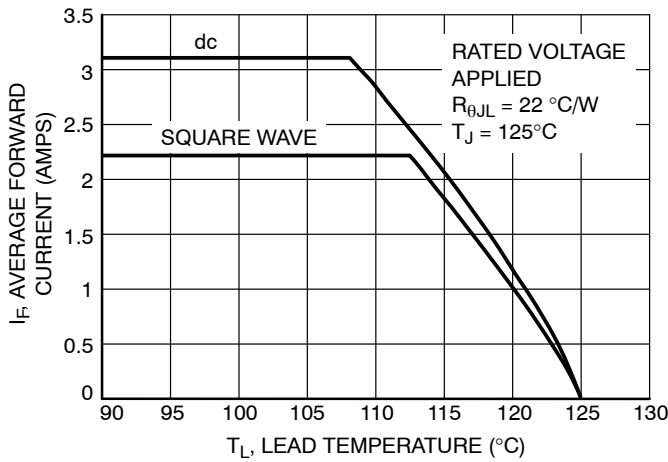
**ELECTRICAL CHARACTERISTICS**

Maximum Instantaneous Forward Voltage (Note 1)  ( $I_F = 0.1$ A) ( $I_F = 1.0$ A) ( $I_F = 2.0$ A)	$V_F$	$T_J = 25^\circ\text{C}$	$T_J = 100^\circ\text{C}$	V
		0.550	0.65	
		0.655	0.73	
Maximum Instantaneous Reverse Current  ( $V_R = 5.0$ V) ( $V_R = 10$ V)	$I_R$	$T_J = 25^\circ\text{C}$	$T_J = 100^\circ\text{C}$	mA
		0.25	40	
		0.70	60	

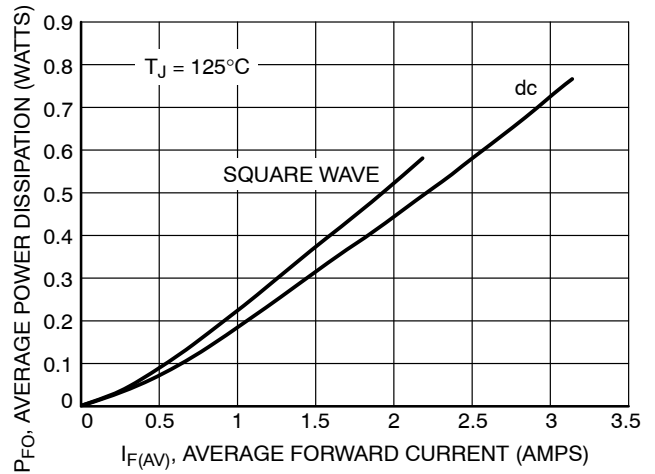

**Figure 1. Typical Forward Voltage**

**Figure 2. Maximum Forward Voltage**



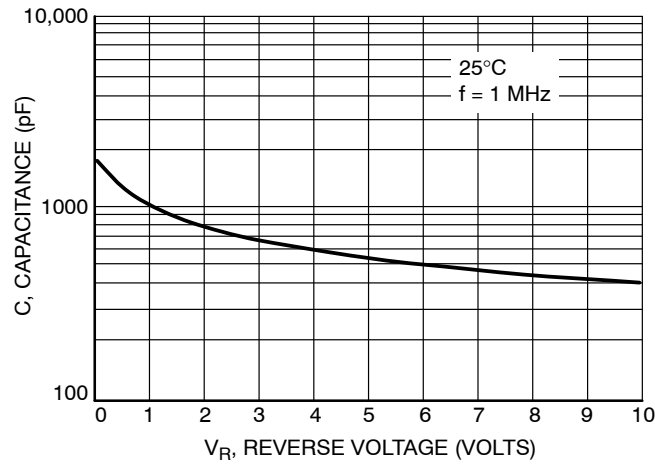
**Figure 3. Typical Reverse Current**



**Figure 4. Current Derating - Junction to Lead**



**Figure 5. Forward Power Dissipation**



**Figure 6. Typical Capacitance**

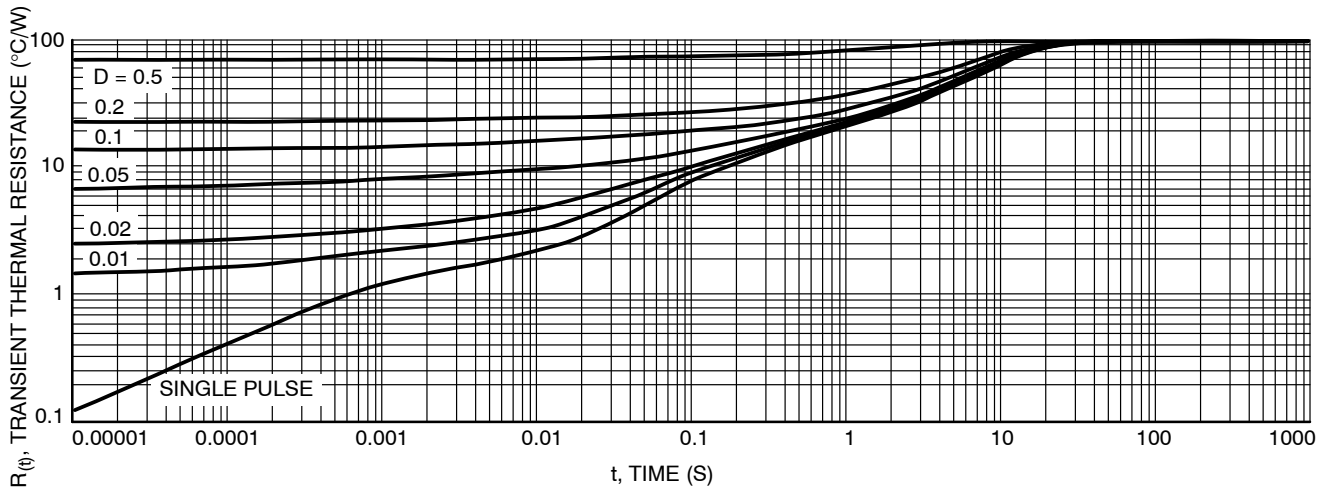


Figure 7. Thermal Response, Junction to Ambient (min pad)

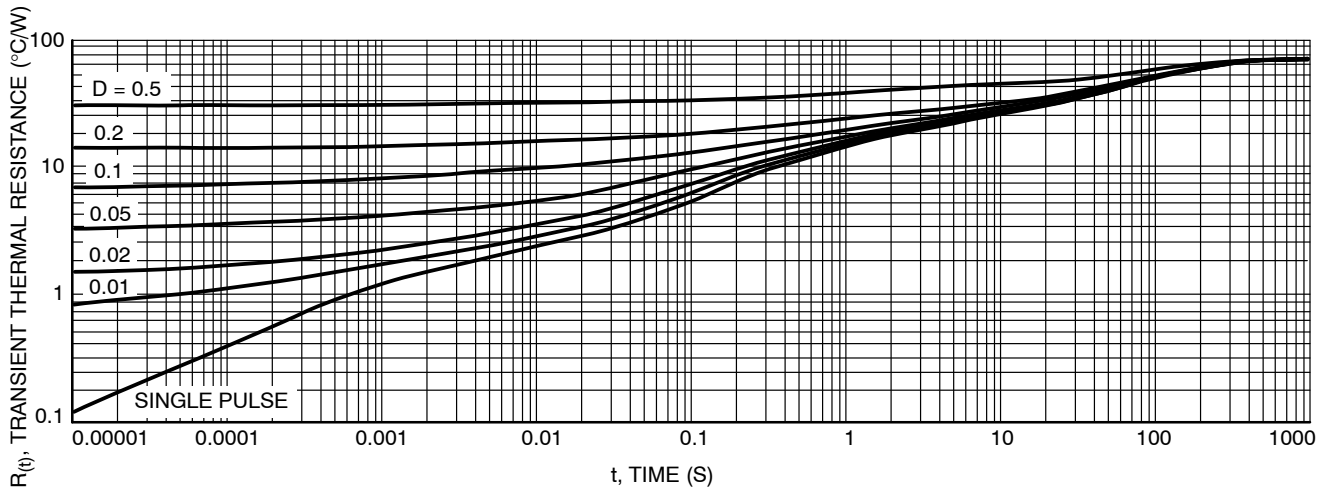


Figure 8. Thermal Response, Junction to Ambient (1 inch pad)