

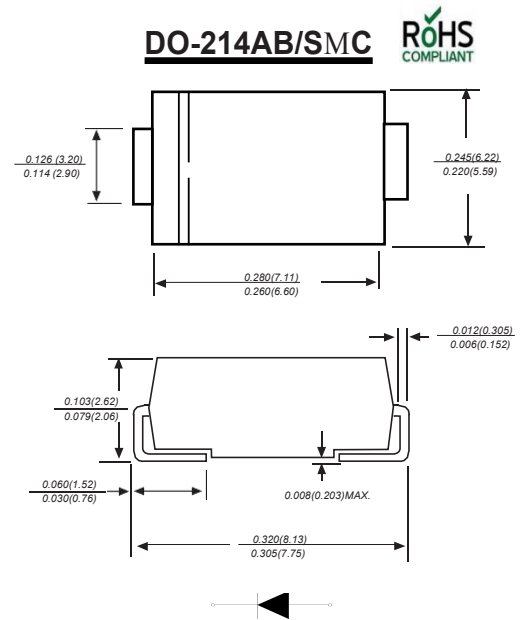
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250 °C/10 seconds at terminals

Mechanical Data

Case : JEDEC DO-214AB/SMC molded plastic body
 Terminals : Solderable per MIL-STD-750, Method 2026
 Polarity : Color band denotes cathode end Mounting
 Position : Any
 Weight : 0.0077 ounce, 0.22 grams



MARKING DIAGRAM



ORDERING INFORMATION

Device	Package	Shipping
SS310	SMC (Pb-Free)	3000 / Tape & Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Average Rectified Forward Current (At Rated V_R , $T_L = 100^\circ\text{C}$)	$I_{F(AV)}$	3.0	A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60 Hz)	I_{FSM}	130	A
Operating Junction Temperature Range (Note 1)	T_J	- 65 to +175	$^\circ\text{C}$

THERMAL CHARACTERISTICS

Thermal Resistance, Junction-to-Lead	$R_{\theta JL}$	11	$^\circ\text{C/W}$
--------------------------------------	-----------------	----	--------------------

ELECTRICAL CHARACTERISTICS

Rating	Symbol	Value	Unit
Maximum Instantaneous Forward Voltage (Note 2) ($i_F = 3.0\text{ A}$, $T_J = 25^\circ\text{C}$) ($i_F = 6.0\text{ A}$, $T_J = 25^\circ\text{C}$) ($i_F = 3.0\text{ A}$, $T_J = 125^\circ\text{C}$) ($i_F = 6.0\text{ A}$, $T_J = 125^\circ\text{C}$)	V_F	0.79 0.90 0.62 0.70	V
Maximum Instantaneous Reverse Current (Note 2) (Rated dc Voltage, $T_J = 25^\circ\text{C}$) (Rated dc Voltage, $T_J = 125^\circ\text{C}$)	i_R	0.05 5.0	mA

2. Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.

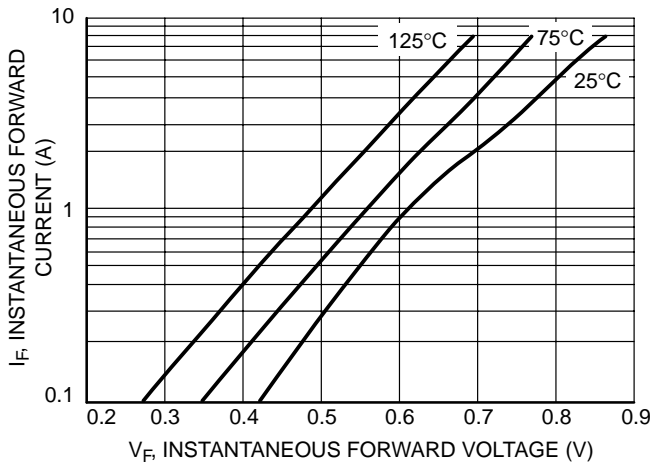


Figure 1. Typical Forward Voltage

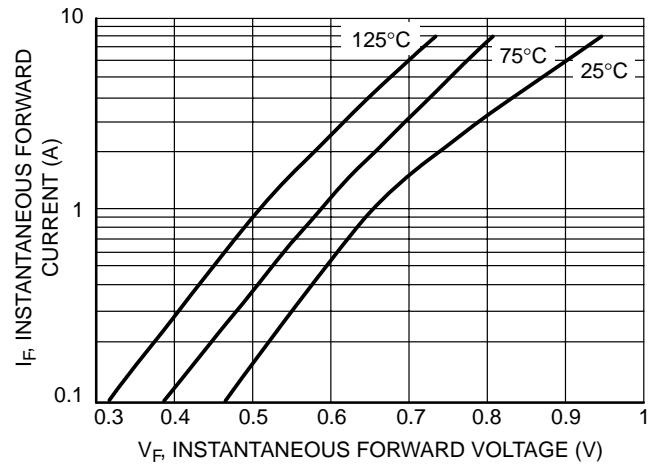


Figure 2. Maximum Forward Voltage

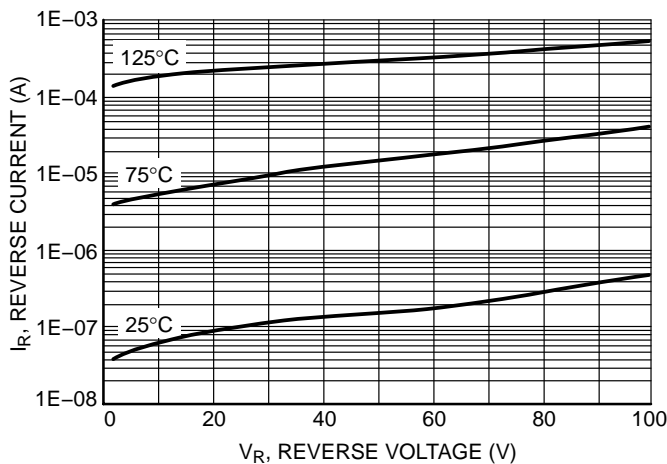


Figure 3. Typical Reverse Current

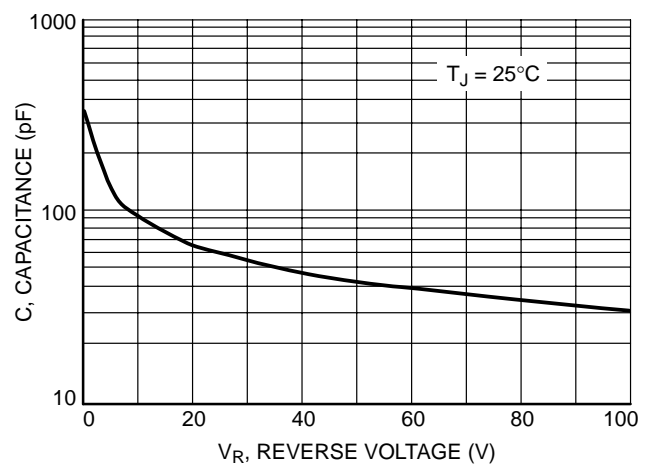


Figure 4. Typical Capacitance

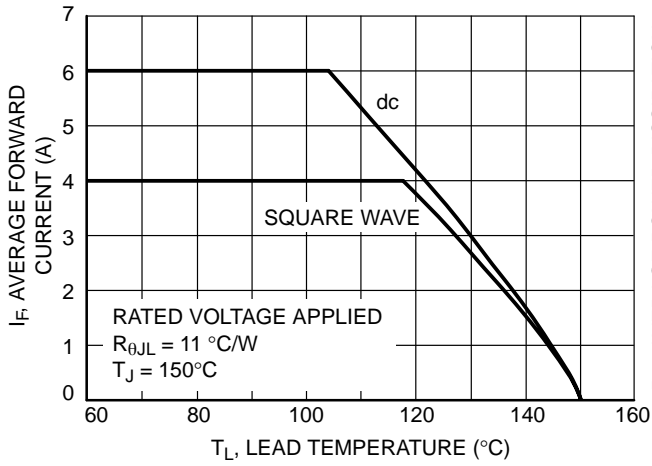


Figure 5. Current Derating - Lead

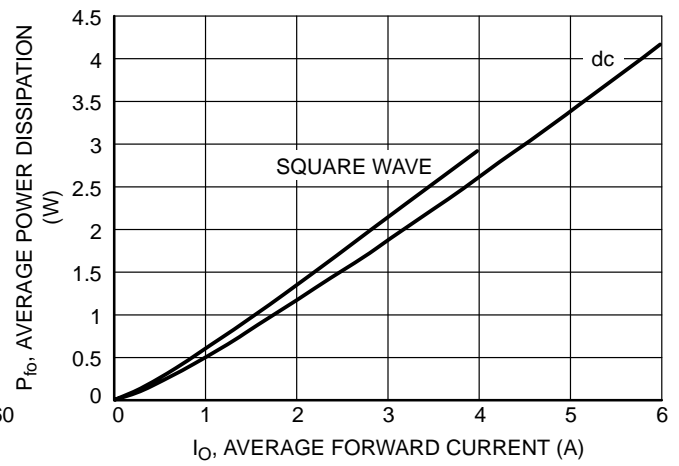


Figure 6. Forward Power Dissipation