

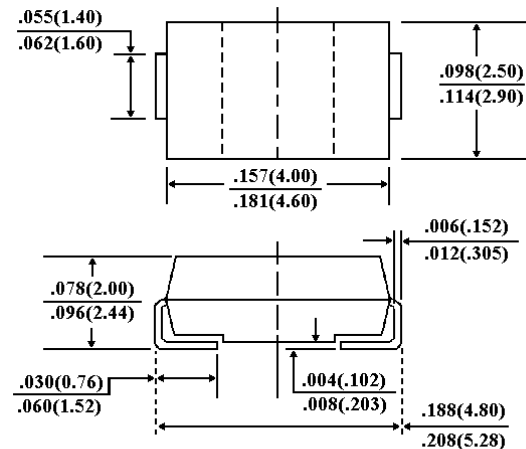
# SR22 THRU SR29

## MINI SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER VOLTAGE - 20 to 90 Volts CURRENT - 2.0 Amperes

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier majority carrier conduction
- Low power loss, High efficiency
- High current capability, low  $V_F$
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260  $^{\circ}\text{C}$ /10 seconds at terminals

### SMA/DO-214AC



### MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic  
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026  
 Polarity: Color band denotes cathode  
 Standard packaging: 12mm tape (EIA-481)  
 Weight: 0.002 ounce, 0.064 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $^{\circ}\text{C}$  ambient temperature unless otherwise specified.

Resistive or inductive load.

	SYMBOLS	SR22	SR23	SR24	SR25	SR26	SR28	SR29	UNITS		
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	90	Volts		
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	64	Volts		
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	90	Volts		
Maximum Average Forward Rectified Current at $T_J$ (See Figure 1)	$I_{(AV)}$	2.0							Amps		
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	50.0							Amps		
Maximum Instantaneous Forward Voltage at 2.0A (Note 1)	$V_F$	0.5			0.70		0.85		Volts		
Maximum DC Reverse Current $T_A=25^{\circ}\text{C}$ (Note 1)	$I_R$	0.5							mA		
At Rated DC Blocking Voltage $T_A=100^{\circ}\text{C}$		20.0									
Maximum Thermal Resistance (Note 2)	R $\theta$ KJL R $\theta$ KJA	17					75				$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	$T_J$	-50 to +125							$^{\circ}\text{C}$		
Storage Temperature Range	$T_{STG}$	-50 to +150							$^{\circ}\text{C}$		

### NOTES:

1. Pulse Test with PW=300  $\mu\text{s}$  sec, 2% Duty Cycle.
2. Mounted on P.C.Board with 8.0mm<sup>2</sup> (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES  
SR22 THRU SR29

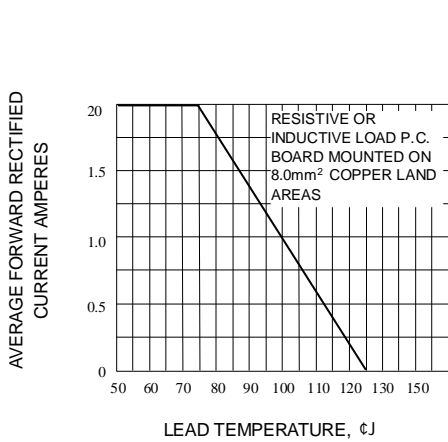


Fig. 1-FORWARD CURRENT DERATING CURVE

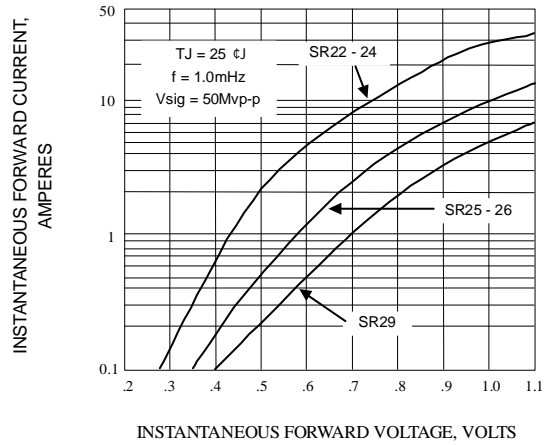


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

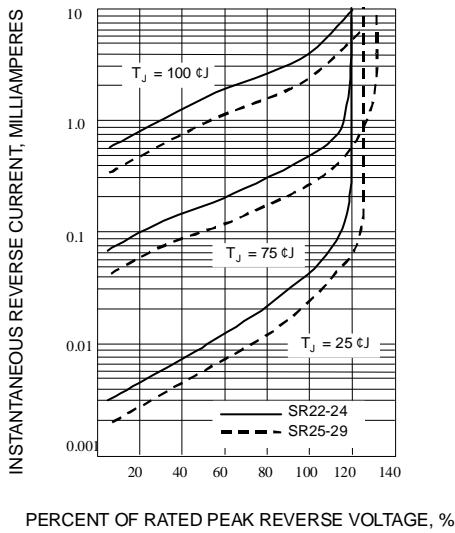


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

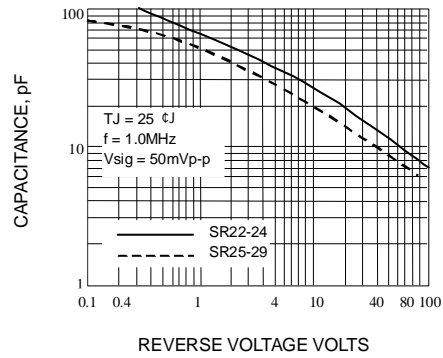


Fig. 4-TYPICAL JUNCTION CAPACITANCE

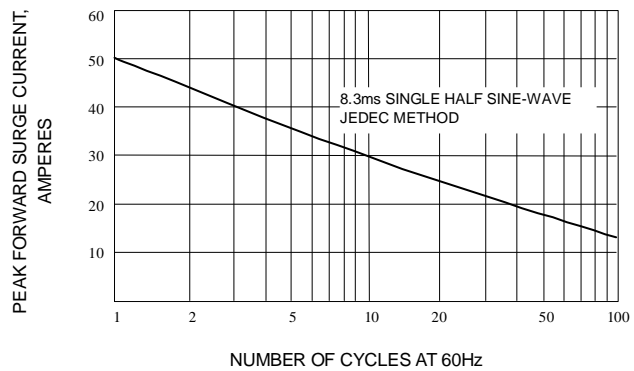


Fig. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT