

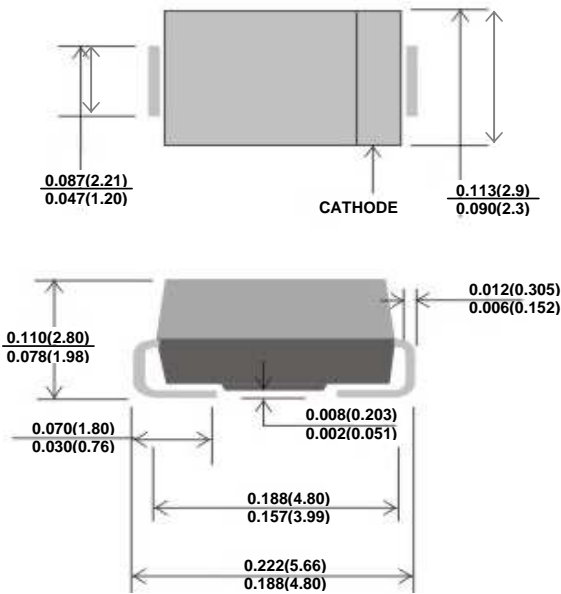


# SS22 THRU SS2200

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 2.0 Ampere

### DO-214AC



### 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

### MECHANICAL DATA

**Case:** JEDEC DO-214AC/SMA molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.003 ounce, 0.093 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

PARAMETER	SYMBOLS	SS22	SS23	SS24	SS25	SS26	SS28	SS 2100	SS 2150	SS 2200	UNITS	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	Volts	
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	Volts	
Maximum DC blocking voltage	$V_R$	20	30	40	50	60	80	100	150	200	Volts	
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_{F(AV)}$	2.0									Amp	
Peak forward surge current at 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50.0									Amps	
Maximum Forward Voltage at $I_F=2.0A$	$V_F$	0.50			0.70		0.85		0.92		Volts	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.5									mA	
		10.0					5.0					
Typical Junction Capacitance (NOTE 1)	$C_J$	220			180			160			pF	
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	75									°C/W	
Operating Junction Temperature Range	$T_J$	-65 to +125					-65 to +150					°C
Storage Temperature Range	$T_{STG}$	-65 to +150									°C	

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Mounted with minimum recommended padsize · PCBoard FR4.

3.  $T_J=25^\circ C$  unless otherwise specified.



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## RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

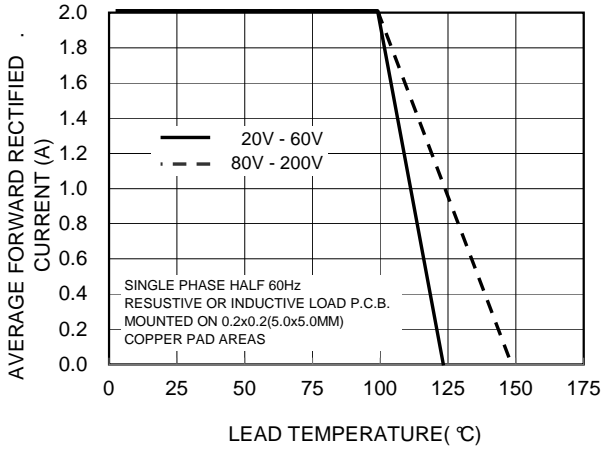


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

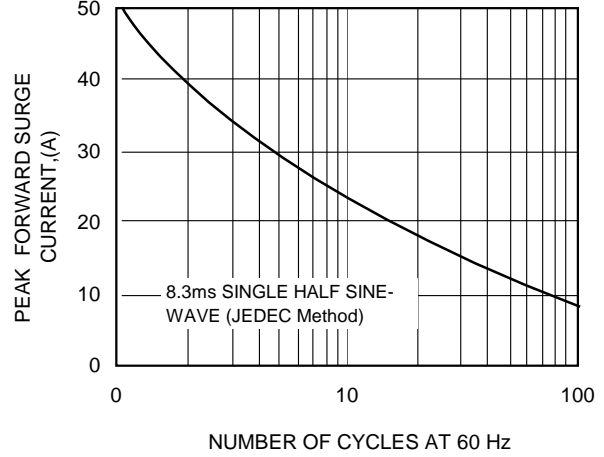


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

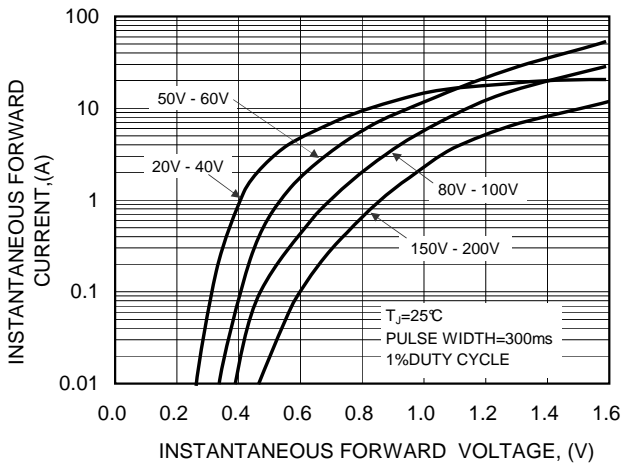


FIG. 4-TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

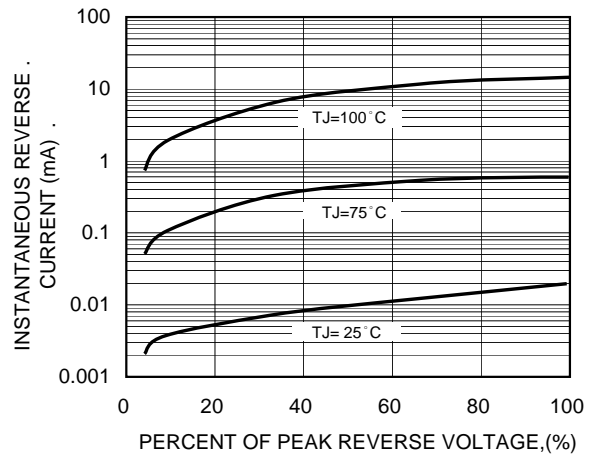


FIG. 5-TYPICAL JUNCTION CAPACITANCE

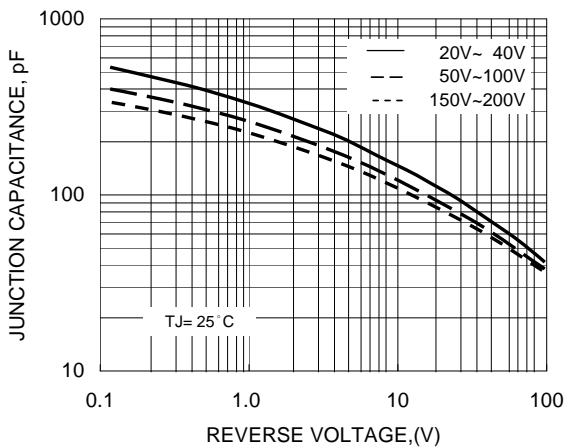


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

