

# SS22-SS210

● **FEATURES**

- For surface mount applications
- Metal-Semiconductor Junction with Guarding
- Epitaxial Construction
- Metal-Semiconductor Junction with Guarding
- Very Low forward voltage drop
- High Current capability
- For use in low voltage, high frequency inverters, Free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

● **MECHANICAL DATA**

- Case: Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750 Method 2026
- Polarity: Indicated by Cathode Band
- Weight: 0.003ounce, 0.093gram



● **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, derate by 20%.

	SYMBOLS	SS22	SS23	SS24	SS25	SS26	SS28	SS29	SS210	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	63	70	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current at $T_L=105^\circ\text{C}$	$I_{(AV)}$	2.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50								Amps
Maximum Forward Voltage at 2.0A DC	$V_F$	0.55			0.75		0.85			Volts
Maximum DC Reverse Current at rated DC blocking voltage (Note 1)	$I_R$	$T_A=25^\circ\text{C}$								mA
		$T_A=100^\circ\text{C}$								
Typical Junction Capacitance (Note 1)	$C_J$	75								$\text{p}^F$
Typical thermal capacitance (Note 2)	$R_{QJL}$	15								$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +125								$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150								

**NOTES:**

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Lead.

## RATING AND CHARACTERISTIC CURVES SS22 thru SS210

FIG.1-FORWARD CURRENT DERATING CURVE

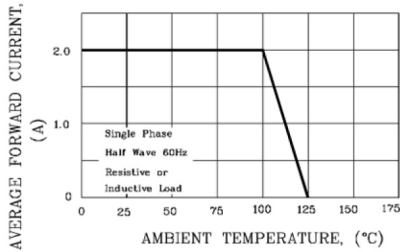


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

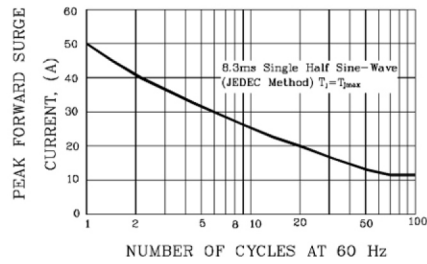


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

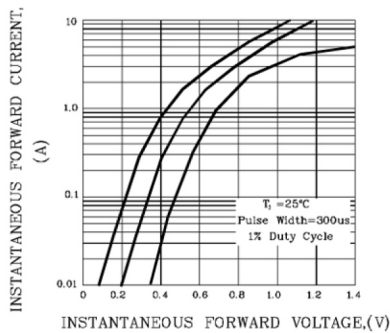


FIG.4-TYPICAL JUNCTION CAPACITANCE

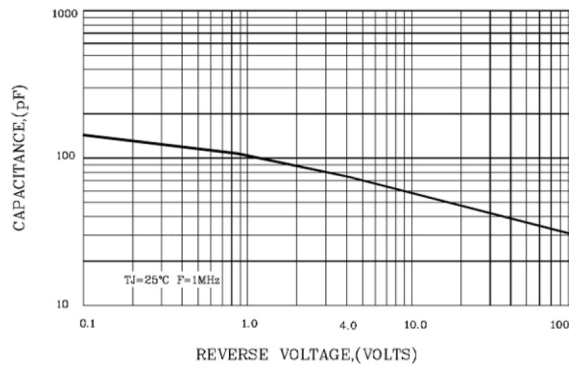


FIG.5-TYPICAL REVERSE CHARACTERISTICS

