



MASTER INSTRUMENT CORPORATION

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER SS22 THRU SS210

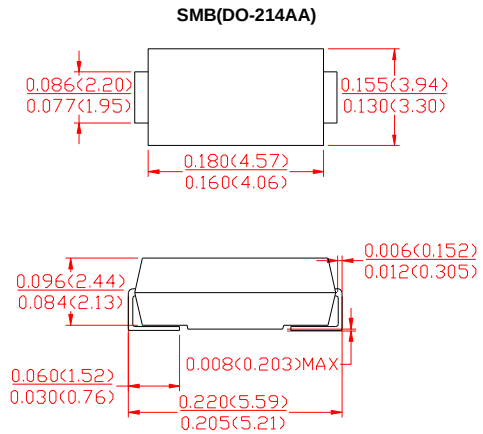
VOLTAGE RANGE 20 to 100 Volts
Forward Current 2.0 Amperes

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



Dimensions in inches and (millimeters)

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 TL=105℃		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
MaximumDC Reverse Current at rated DC blocking voltage (Note 1)	T _A =25℃	I _R	0.5								mA
	T _A =100℃		15.0								
Typical Junction Capacitance (Note 1)		C _J	75								p ^F
Typical thermal capacitance (Note 2)		R _{QJL}	15								℃/W
Operating Temperature Range		T _J	-55 to +125								℃
Storage temperature range		T _{STG}	-55 to +150								

NOTES:

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



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RATING AND CHARACTERISTIC CURVES SS22 thru SS210

FIG.1-FORWARD CURRENT DERATING CURVE

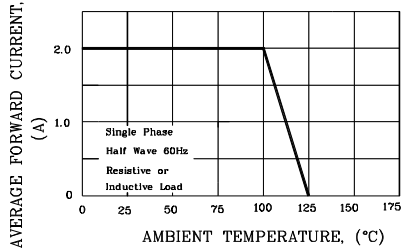


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

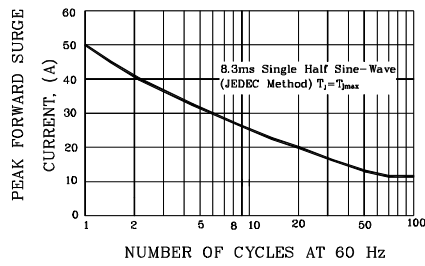


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

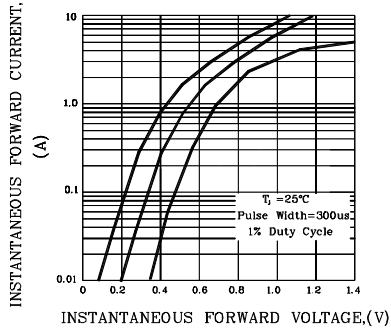


FIG.4-TYPICAL JUNCTION CAPACITANCE

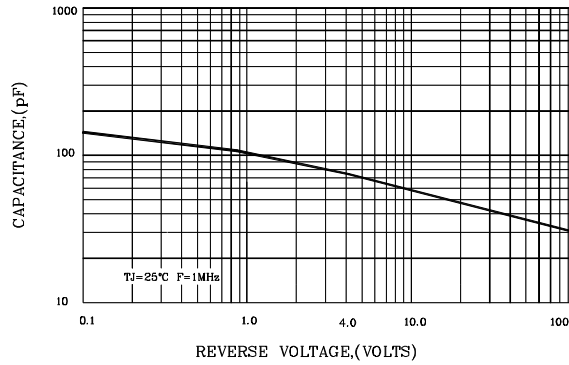


FIG.5-TYPICAL REVERSE CHARACTERISTICS

