SS12B thru SS110B

SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **20** to **100** Volts
FORWARD CURRENT - **1.0** Amperes

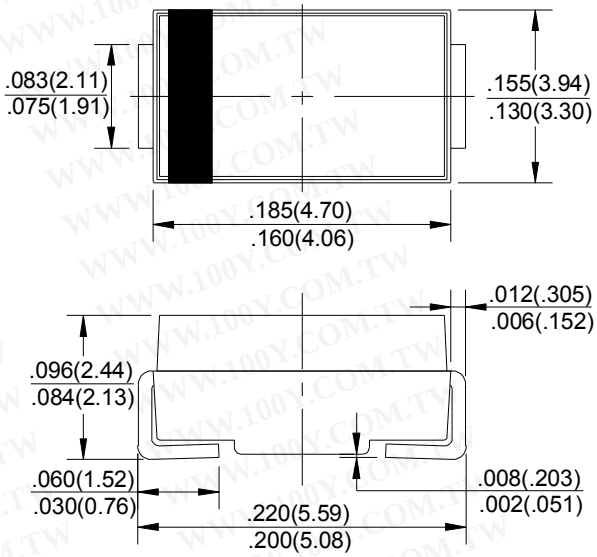
FEATURES

- For surface mounted applications
- Metal-Semiconductor junction with guarding
- Epitaxial construction
- Very low forward votage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

MECHANICAL DATA

- Case： Molded Plastic
- Polarity:Color band denotes cathode
- Weight: 0.003 ounces,0.093 grams
- Mounting position: Any

SMB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave ,60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SS12B	SS13B	SS14B	SS15B	SS16B	SS18B	SS110B	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current @T_L=100 ℃	$I_{(AV)}$	1.0							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	40							A
Maximum Forward Voltage at 1.0A DC	V_F	0.45	0.55	0.6	0.70		0.85		V
Maximum DC Reverse Current @T_J=25℃	I_R	1.0							mA
at Rated DC Blocking Voltage @T_J=100℃		10							
Typical Junction Capacitance (Note1)	C_J	110							pF
Typical Thermal Resistance (Note2)	$R_{\theta JL}$	20							℃/W
Operating Temperature Range	T_J	-55 to + 150							℃
Storage Temperature Range	T_{STG}	-55 to + 150							℃

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
2.Thermal resistance junction to lead.

FIG. 1 - FORWARD CURRENT DERATING CURVE

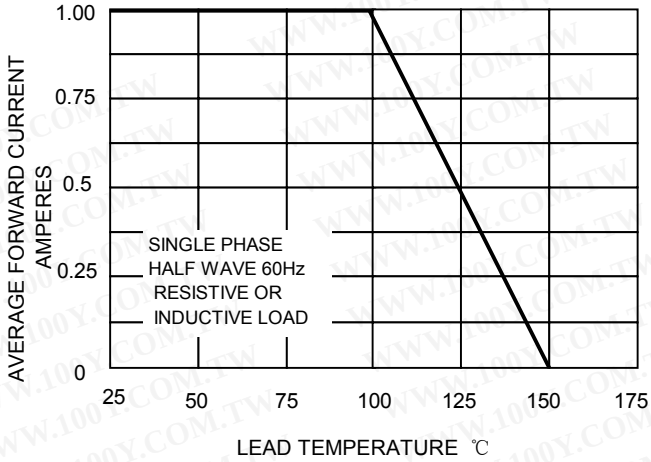


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

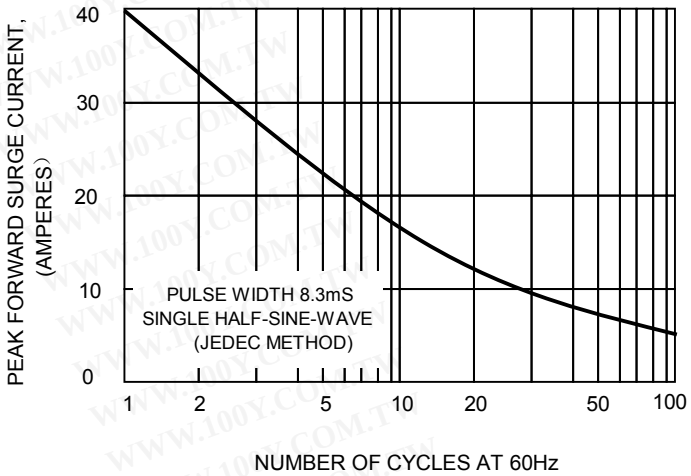


FIG.3-TYPICAL FORWARD CHARACTERISTICS

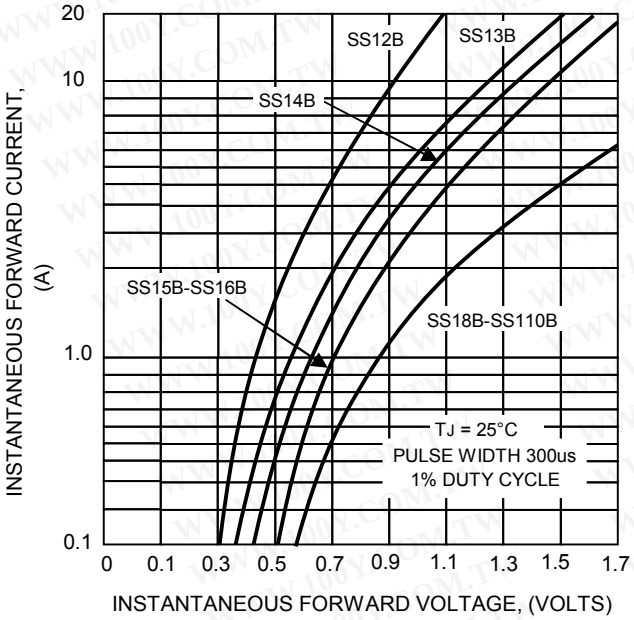


FIG.4-TYPICAL JUNCTION CAPACITANCE

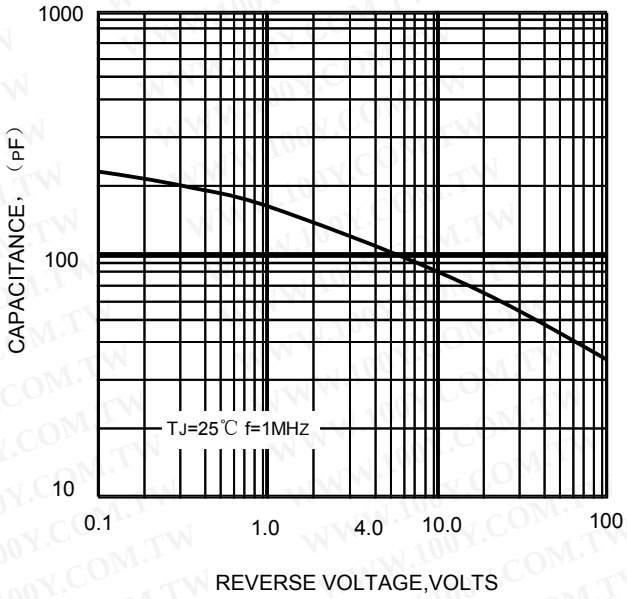


FIG.5-TYPICAL REVERSE CHARACTERISTICS