

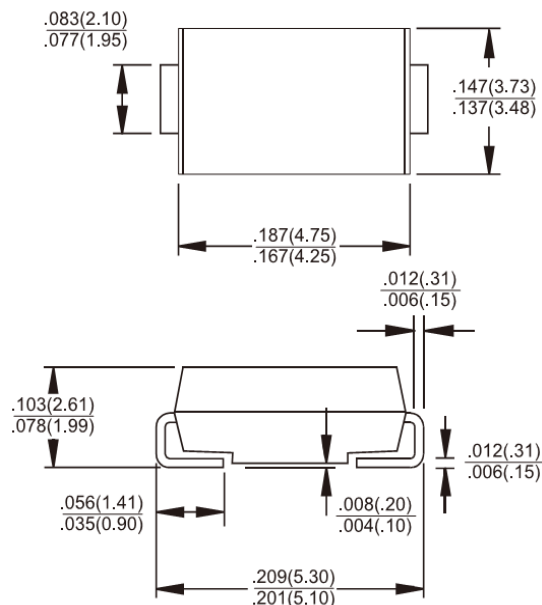
**SMB**

**Features**

- ✧ For surface mounted application
- ✧ Easy pick and place
- ✧ Metal to silicon rectifier, majority carrier conduction
- ✧ Low power loss, high efficiency
- ✧ High current capability, low VF
- ✧ High surge current capability
- ✧ Plastic material used carriers Underwriters Laboratory Classfication 94V-0
- ✧ Epitaxial construction
- ✧ High temperature soldering guaranteed: 260°C/10s at terminals
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode

**Mechanical Data**

- ✧ Case: Molded plastic
- ✧ Terminal: Pure tin plated, lead free
- ✧ Polarity: Indicated by cathode band
- ✧ Packaging: 12mm tape per EIA STD RS-481
- ✧ Weight: 0.093 gram


**Dimensions in inches and (millimeters)**
**Marking Diagram**


- SSH2X = Specific Device Code
- G = Green Compound
- Y = Year
- M = Work Month

**Maximum Ratings and Electrical Characteristics**

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SSH210	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS Voltage	$V_{RMS}$	70	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50	A
Maximum Instantaneous Forward Voltage (Note 1) IF=2 A @ $T_A=25^{\circ}C$ IF=2 A @ $T_A=125^{\circ}C$	$V_F$	0.79 0.65	V
Maximum Reverse Current @ Rated VR $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	$I_R$	1 1	$\mu A$ mA
Typical Junction Capacitance (Note 2)	$C_j$	70	pF
Typical Thermal Resistance	$R_{\theta JL}$	25	$^{\circ}C/W$
Operating Temperature Range	$T_J$	- 65 to + 175	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	- 65 to + 175	$^{\circ}C$

Note 1: Pulse Test with PW=300u sec, 1% Duty Cycle

Note 2: Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES (SSH210)

FIG.1 FORWARD CURRENT DERATING CURVE

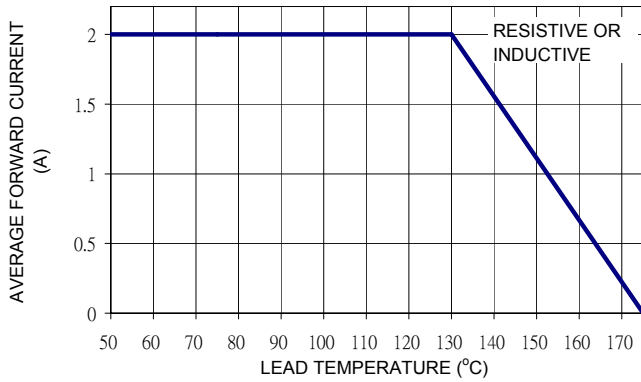


FIG. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

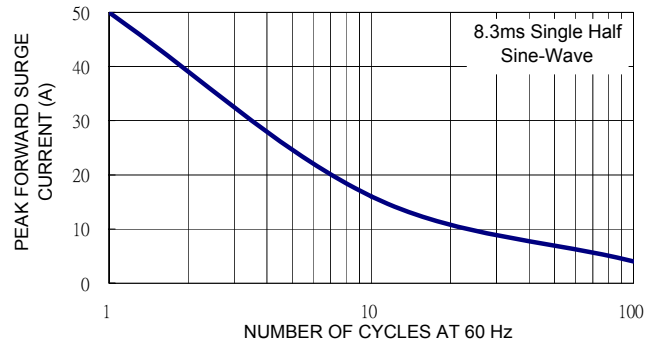


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

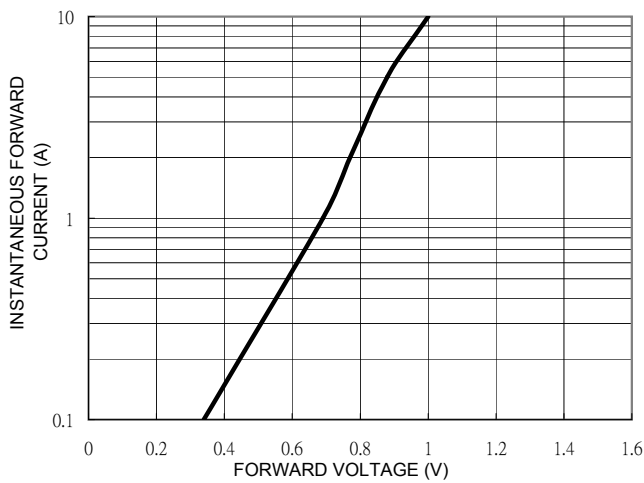


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

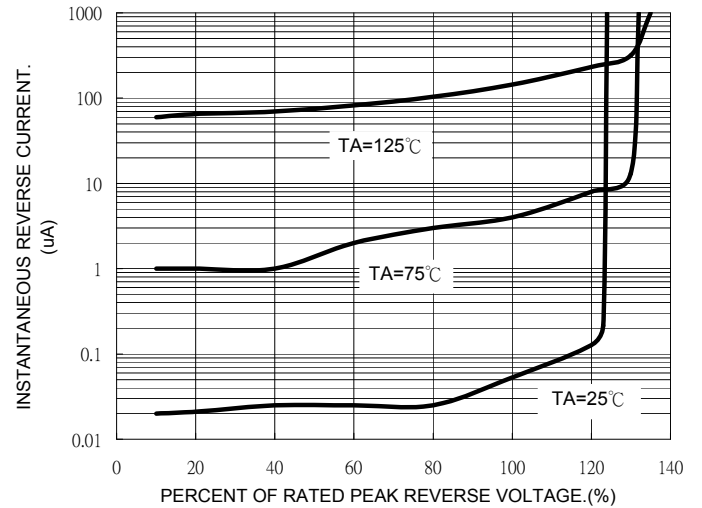


FIG. 5 TYPICAL JUNCTION CAPACITANCE

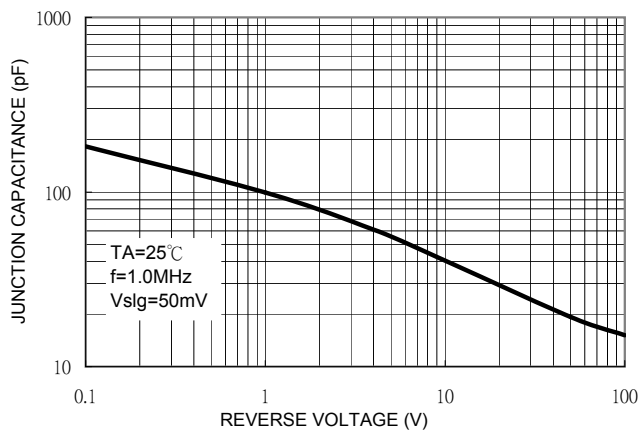


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

