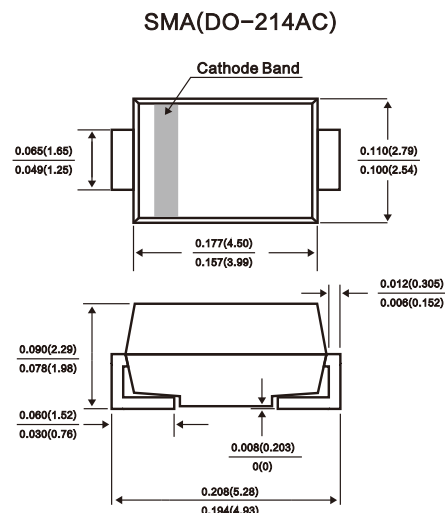


### FEATURES

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge 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 : JEDEC SMA(DO-214AC) molded plastic body
- Terminals : Solder Plate, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.003 ounce, 0.093 gram



Dimensions in inches and (millimeters)

### 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	SS 32	SS 33	SS 34	SS 35	SS 36	SS 39	SS 310	SS 315	SS 320	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	90	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	63	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	90	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0									A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	100				70				A	
Maximum Instantaneous Forward Voltage (Note 1) @ 3.0A $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$V_F$	0.5 0.4		0.75 0.65		0.85 0.70		0.95 0.80		V	
Maximum Reverse Current @ Rated VR $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	0.5 10 -				0.1 5 0.5				mA	
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	17 55									$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	- 55 to + 125				- 55 to + 150				$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$	- 55 to + 150									$^\circ\text{C}$

Note 1: Pluse Test with PW=300 usec, 1% Duty Cycle

FIG. 1 FORWARD CURRENT DERATING CURVE

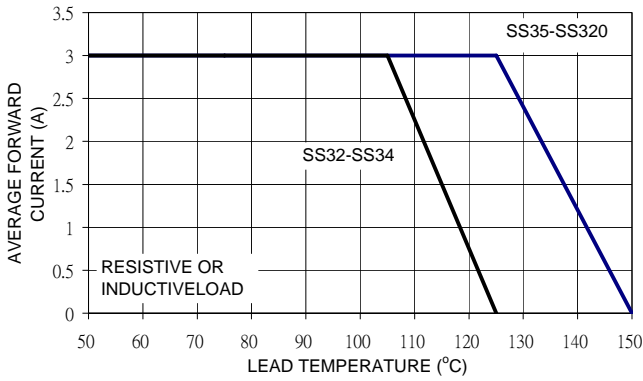


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

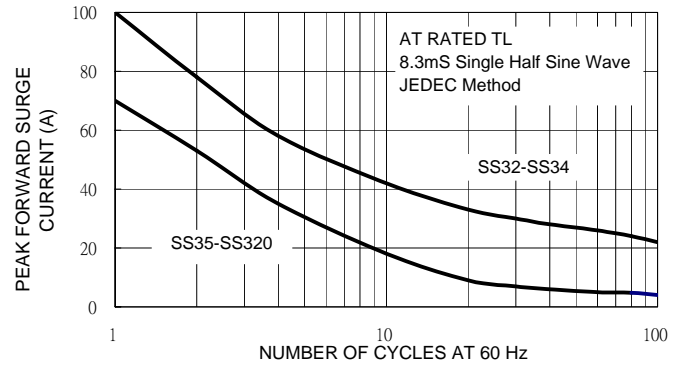


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

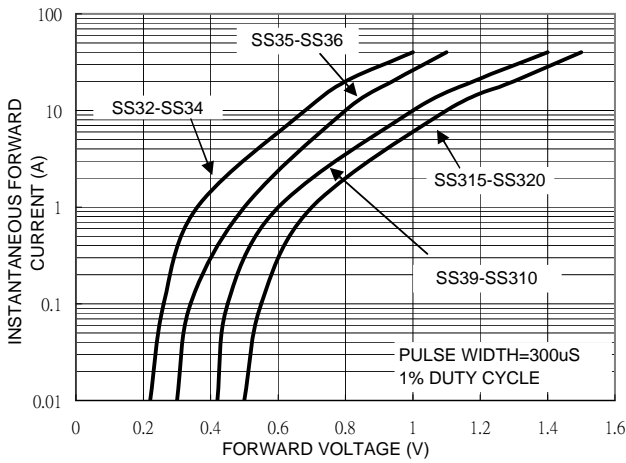


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

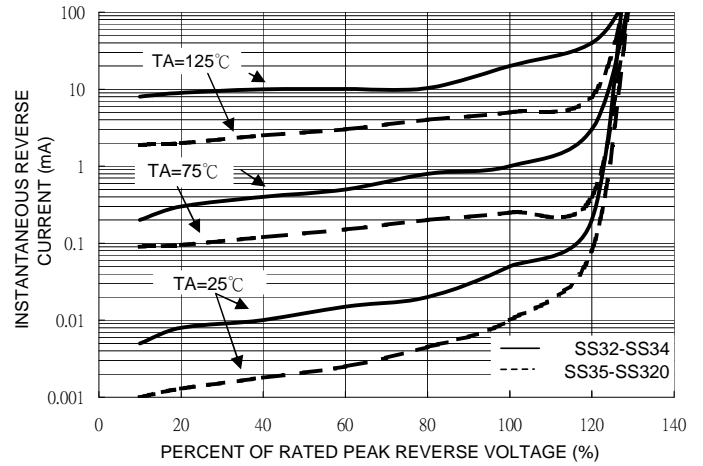


FIG. 5 TYPICAL JUNCTION CAPACITANCE

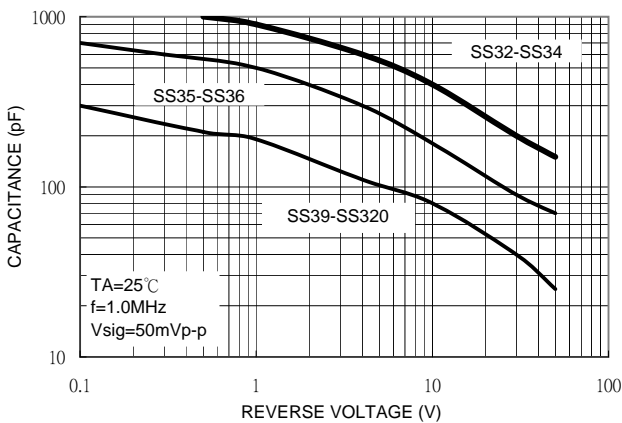
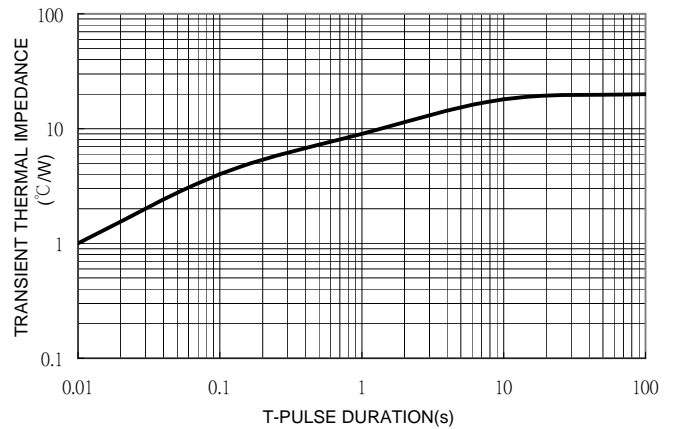


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE



**ORDERING INFORMATION**

<b>Order Code</b>	<b>Package</b>	<b>Baseqty</b>	<b>Deliverymode</b>
SS32	SMA	2000	Tape and reel
SS33	SMA	2000	Tape and reel
SS34	SMA	2000	Tape and reel
SS35	SMA	2000	Tape and reel
SS36	SMA	2000	Tape and reel
SS39	SMA	2000	Tape and reel
SS310	SMA	2000	Tape and reel
SS315	SMA	2000	Tape and reel
SS320	SMA	2000	Tape and reel