



**TAYCHIPST**

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS**

**SS32 THRU SS320**  
**20V-200V 3.0A**

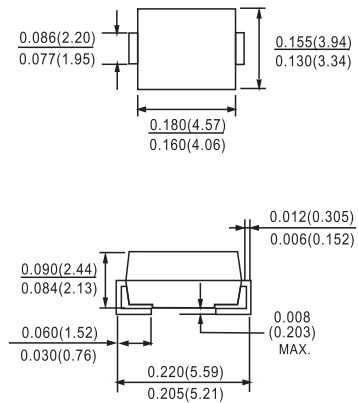
**FEATURES**

- 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 SMB(DO-214AA) 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

DO-214AA(SMB)



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 $T_A=25^{\circ}C$ $T_A=100^{\circ}C$	$V_F$	0.5 0.4		0.75 0.65		0.85 0.70		0.95 0.80		V	
Maximum Reverse Current @ Rated VR $T_A=25^{\circ}C$ $T_A=100^{\circ}C$ $T_A=125^{\circ}C$	$I_R$	0.5			0.1			-		mA	
		10		5		0.5					
		-			0.5						
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	17 55						°C/W			
Operating Temperature Range	$T_J$	- 55 to + 125			- 55 to + 150						°C
Storage Temperature Range	$T_{STG}$	- 55 to + 150									°C

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



RATINGS AND CHARACTERISTIC CURVES

SS32 THRU SS320

FIG.1 FORWARD CURRENT DERATING CURVE

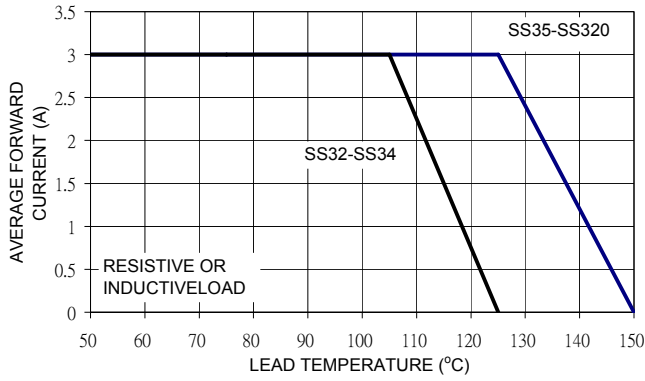


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

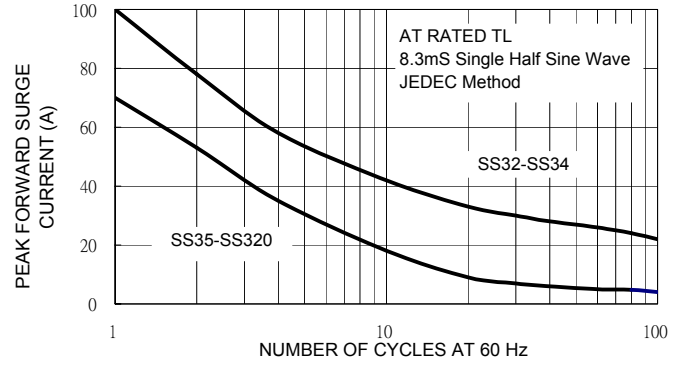


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

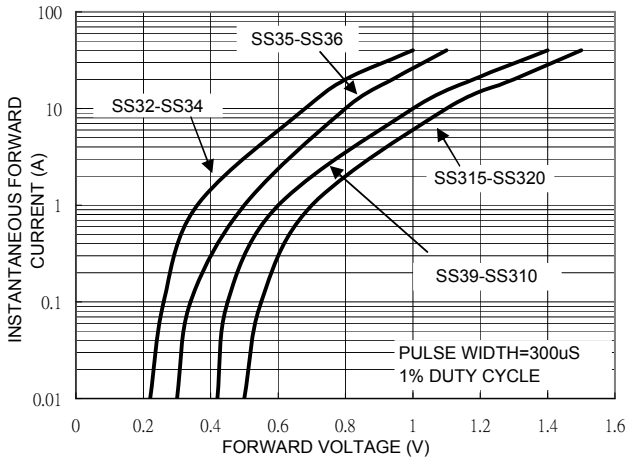


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

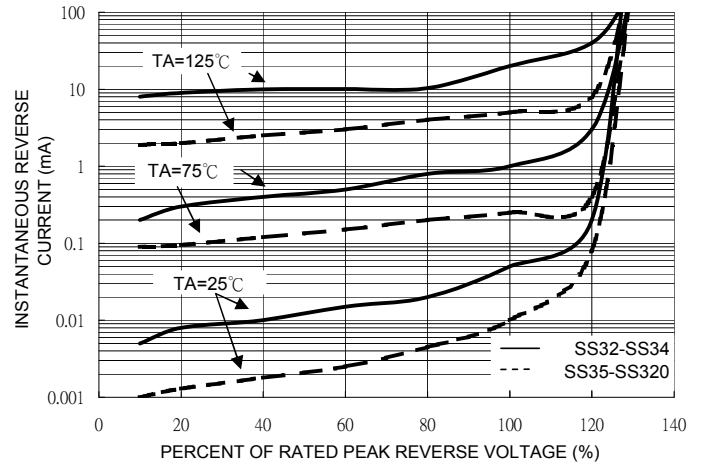


FIG. 5 TYPICAL JUNCTION CAPACITANCE

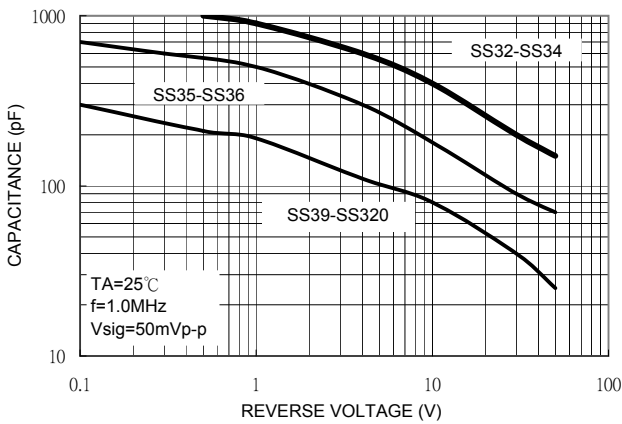


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

