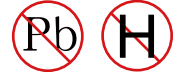




**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

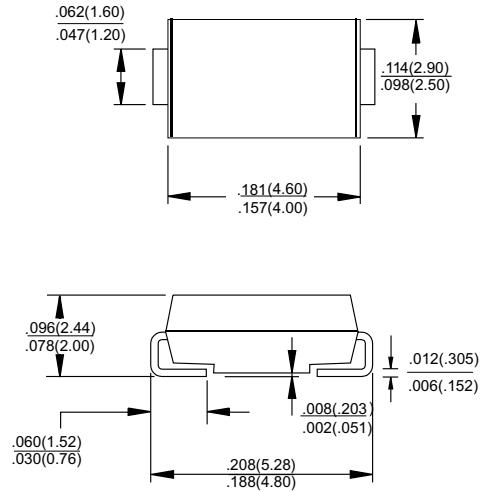


**VOLTAGE- 20 to 200 Volts CURRENT- 5.0 Amperes**

**FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

SMA/DO-214AC Unit:inch(mm)



**MECHANICAL DATA**

- Case: JEDEC DO-214AC molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode)

**Maximum Ratings (TA=25°C unless otherwise noted)**

PARAMETER	SYMBOL	SS52	SS53	SS54	SS55	SS56	SS58	SS510	SS515	SS520	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_F$	5									A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100									A
Maximum Instantaneous Forward Voltage IF=5A @ 25°C	$V_F$	0.55			0.70		0.85		0.87	0.90	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	$I_R$	0.5 10					0.2 5.0				mA
Typical Junction Capacitance(NOTE1)	$C_j$	300			250		150		110		pF
Typical Thermal Resistance	$R_{\theta JC}$	15									°C/W
Operating Temperature Range	$T_J$	-55 to +125					-55 to +150				°C
Storage Temperature Range	$T_{STG}$	-55 to +150									°C

NOTES :

1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC

# DEVICE CHARACTERISTICS

## SS52 THRU SS520

FIG. 1-Typical Forward Current Derating Curve

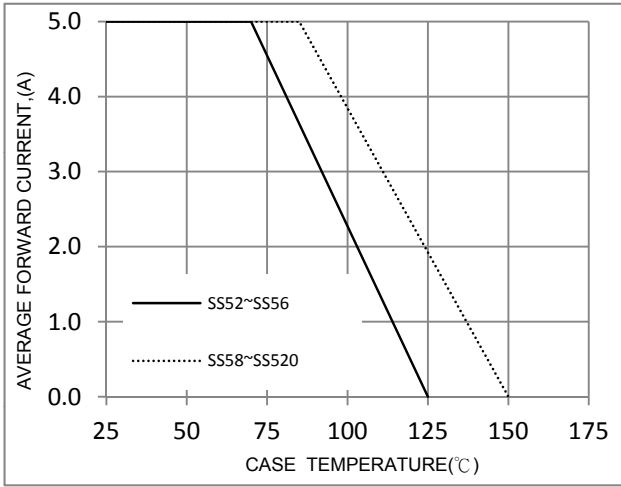


FIG. 2-Typical Forward Characteristics

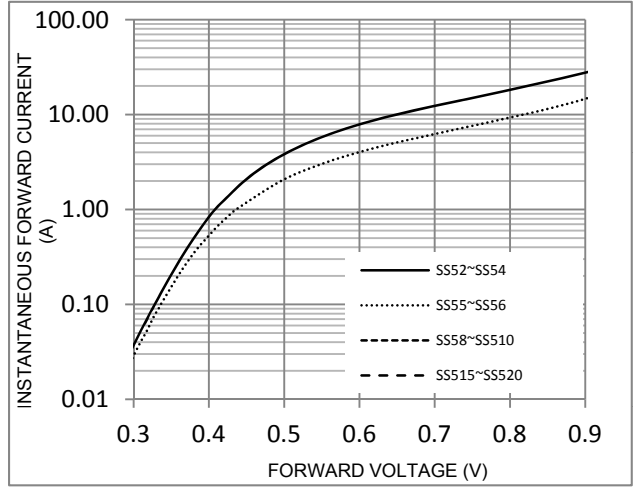


FIG. 3-Maximum Non-Repetitive Forward Surge Current

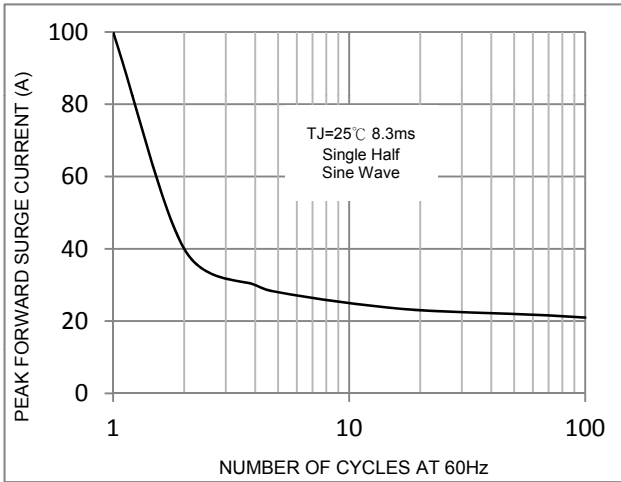


FIG. 4-Typical Reverse Characteristics

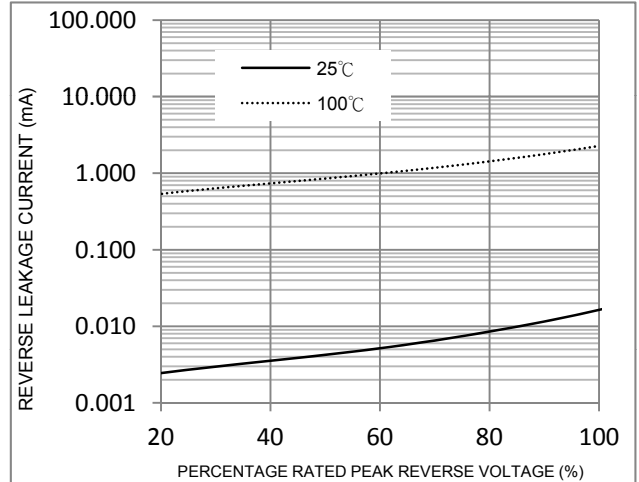


FIG. 5-Typical Junction Capacitance

