

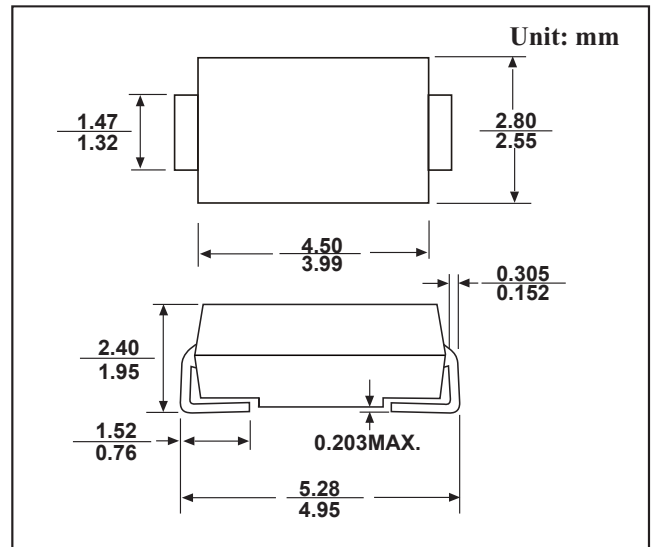
## SMA SCHOTTKY BARRIER DIODE

### FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

### MECHANICAL DATA

- Case style: SMA molded plastic
- Mounting position: Any



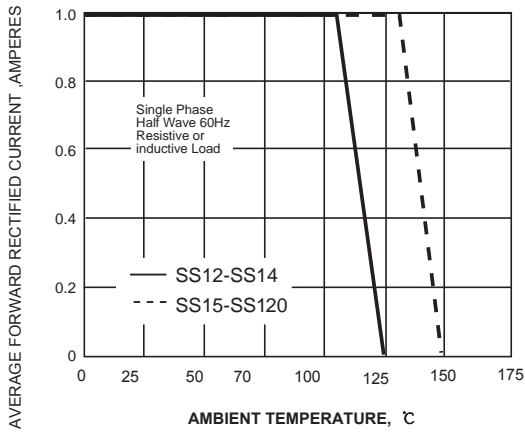
### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

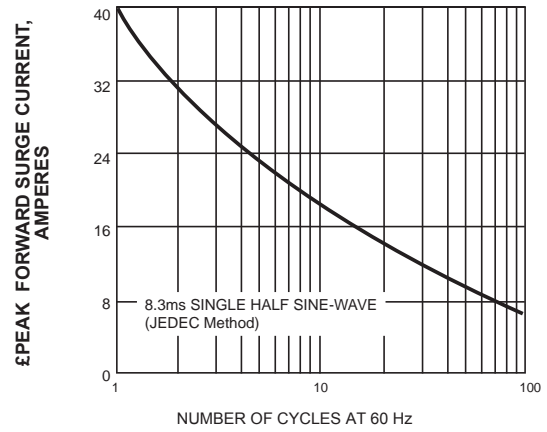
TYPE NUMBER	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward rectified Current 0.375" (9.5mm) lead length	$I_{F(AV)}$	1.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30.0									A
Maximum instantaneous forward voltage at 1.0 A	$V_F$	0.45	0.55	0.70		0.85				V	
Maximum reverse current at rated DC blocking voltage per diode	@ $T_A=25^\circ\text{C}$	0.5									mA
	@ $T_A=100^\circ\text{C}$	6.0			5.0						
Typical Thermal Resistance	$R_{\theta JA}$	88.0									°C/W
Typical junction capacitance	$C_j$	110			90						pF
Storage Temperature	$T_{STG}$	- 55 ---- + 150									°C
Operation Junction Temperature	$T_j$	- 55 ---- + 125			-55 to +150						°C

## RATINGS AND CHARACTERISTIC CURVES

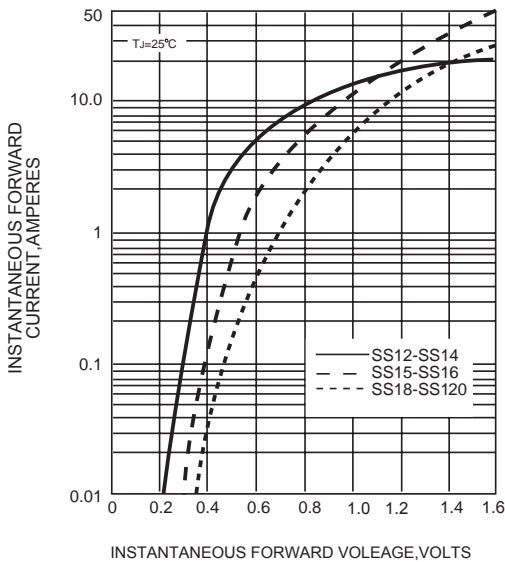
**FIG. 1- FORWARD CURRENT DERATING CURVE**



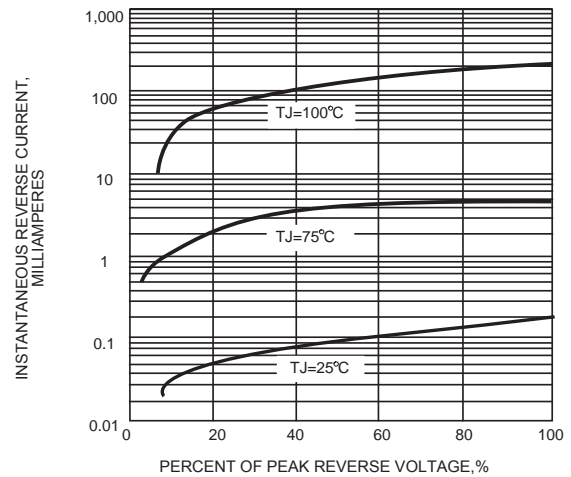
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



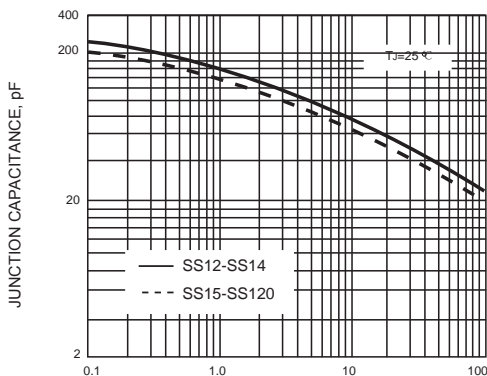
**FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5-TYPICAL JUNCTION CAPACITANCE**



**FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE**

