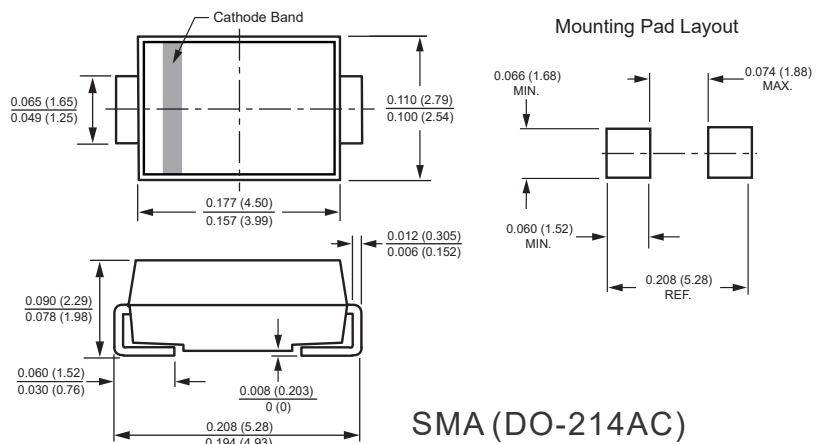


■ **FEATURES**

- I_o 1.0A
- V_{RRM} 20V-100V
- High surge current capability
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- Guard ring for over-voltage protection

■ **MECHANICAL DATA**

- Molded plastic body (UL 94V-0 rated)
- Terminals: Solder plated
- Polarity: Indicated by cathode band
- Weight: 0.21 gram



■ **MAXIMUM RATINGS** ($T_a=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Unit	Test Conditions	SS12	SS13	SS14	SS15	SS16	SS19	SS110	
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	30	40	50	60	90	100	
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load, T_a (Fig.1)	1.0							
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave ,1 cycle , $T_a=25^{\circ}C$	30							
Junction Temperature	T_J	$^{\circ}C$		-55~+125			-55~+150				
Storage Temperature	T_{STG}	$^{\circ}C$		-55 ~ +150							

Notes 1. Thermal resistance from junction to ambient mounted on P.C.B. with 5.0 mm x 5.0 mm copper heatsink

■ **ELECTRICAL AND THERMAL CHARACTERISTICS** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Conditions	SS12	SS13	SS14	SS15	SS16	SS19	SS110
Peak Forward Voltage	V_F	V	$I_F=1.0A$	0.55		0.70		0.85		
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$		0.5		0.1		
	I_{RRM2}			$T_a=100^\circ\text{C}$		10		5.0		2.0
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient	88 ¹⁾						
	$R_{\theta J-L}$		Between junction and terminal	28 ¹⁾						

Notes: Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■ **PACKAGING INFORMATION**

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS12 THRU SS110	F1	Approximate 0.063	5000	10000	80000	13" reel

■ **CHARACTERISTICS (TYPICAL)**

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

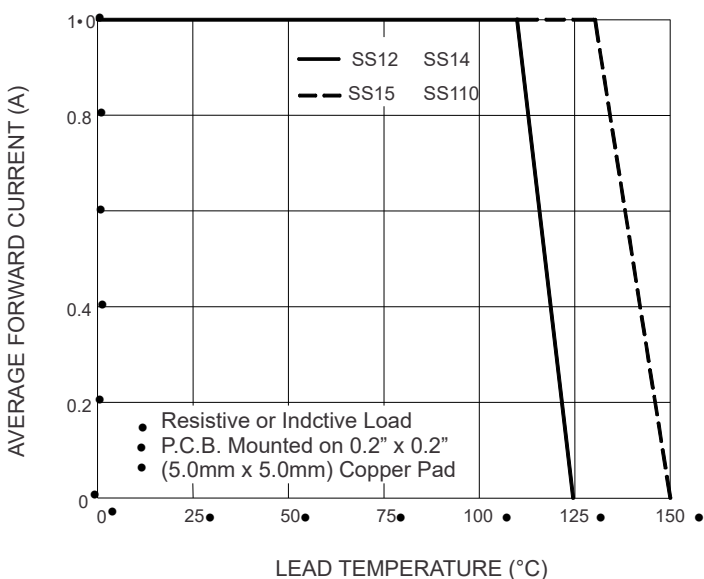


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

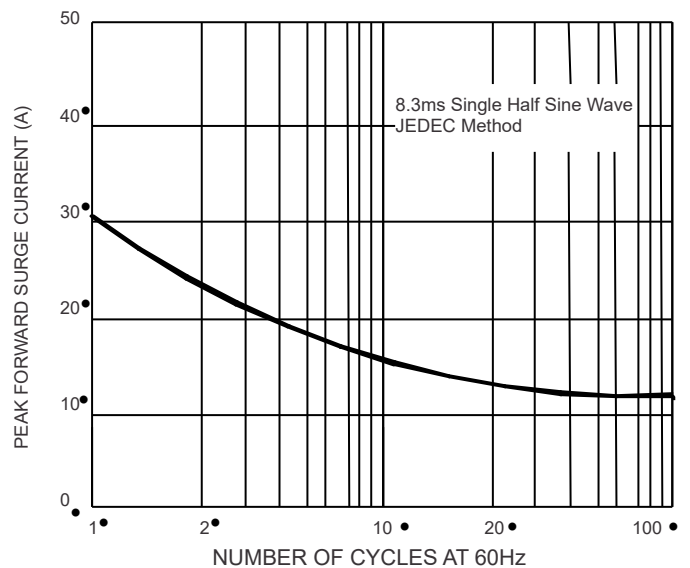


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

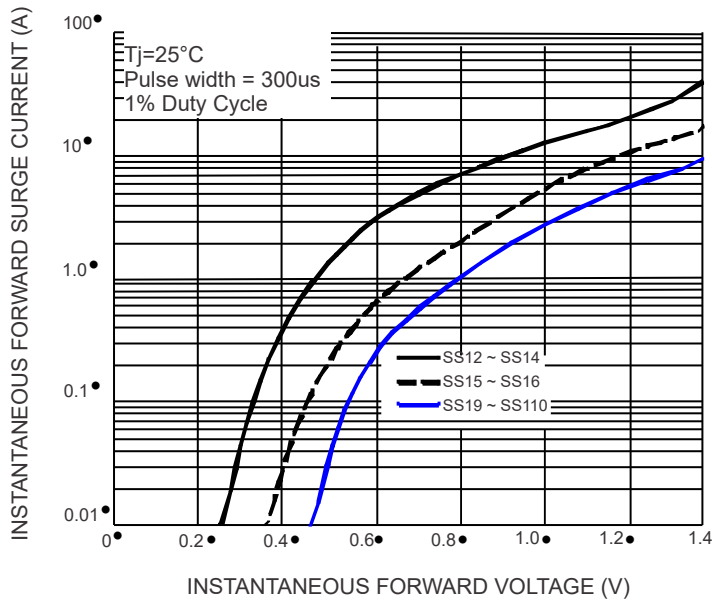
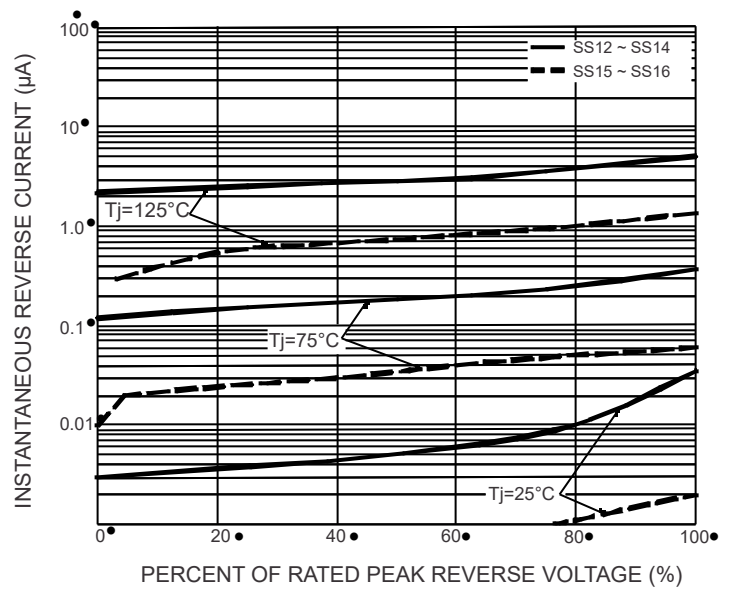
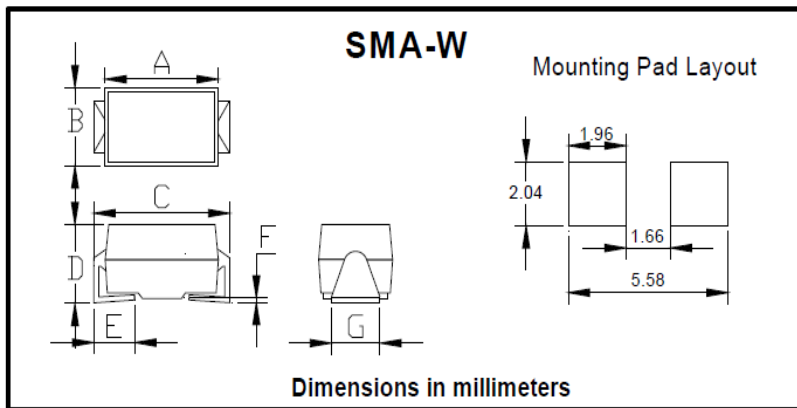


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



■ **OUTLINE DIMENSIONS**



SMA-W		
Dim	Min	Max
A	4.00	4.60
B	2.40	2.65
C	4.80	5.31
D	2.05	2.45
E	0.80	1.50
F	0.10	0.20
G	1.15	1.80