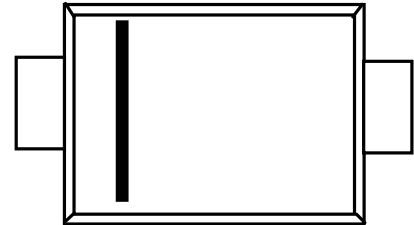


»Features

- Low forward voltage drop
- Guarding protection
- Glass passivated junction
- High current capability
- High efficiency operation
- Extremely low thermal resistance
- Halogen free and RoHS compliant



SMC(DO-214AB)

»General Description

- Case: JEDEC DO -214AB molded plastic
- Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.009 ounces, 0.25 gram

» Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half wave 60HZ. resistive or inductive load. For capacitive load current derate by 20%

CHARACTERISTICS	SYMBOL	SS1045	SS1060	SS10100	UNITS
	Marking	SS1045	SS1060	SS10100	
Maximum repetitive peak reverse voltage	$V_{RRM}$	45	60	100	V
Maximum RMS voltage	$V_{RWS}$	31	42	70	V
Maximum DC blocking voltage	$V_{DC}$	45	60	100	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	10.0			A
Peak forward surge current 8.3ms single half-sine-wave	$I_{FSM}$	150			A
Maximum instantaneous forward voltage at $I_{FM}=10.0\text{A}$	$V_F$	0.55	0.75	0.85	V
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=125^\circ\text{C}$	$I_R$	0.2 50.0		0.1 5.0	m A
Maximum thermal resistance	$R_{\theta JL}$	28			$^\circ\text{C/W}$
Operating temperature range	$T_J$	-55 ---- +125			$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 ---- +150			$^\circ\text{C}$

»Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SMC	Tape/Reel, 13" reel	3000	EIA-481-1

»Typical Performance Characteristics (T<sub>J</sub> = 25 °C, unless otherwise noted)

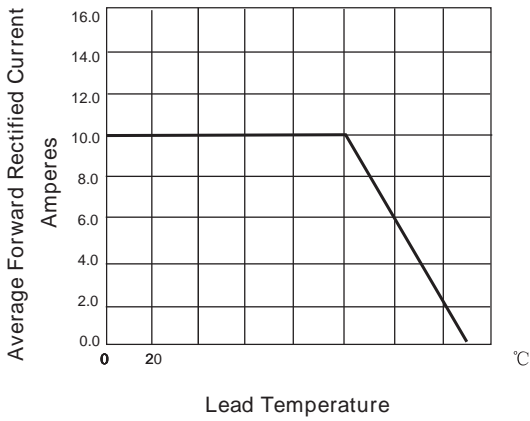


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

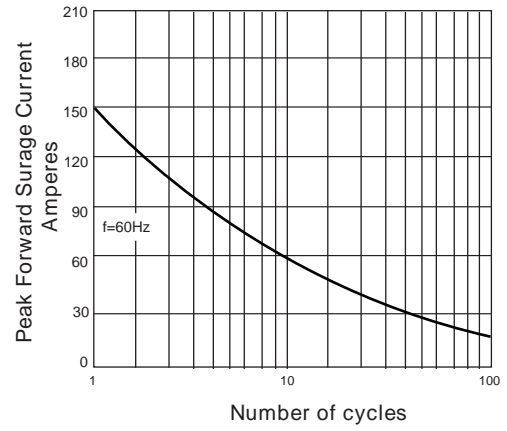


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

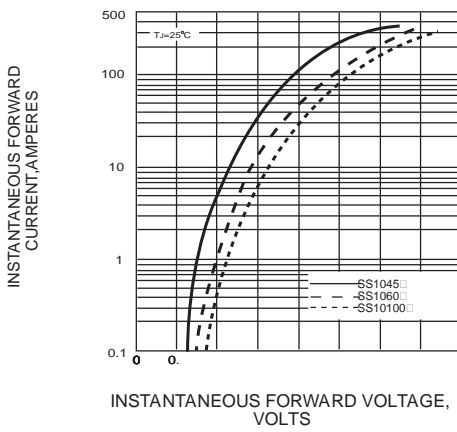


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

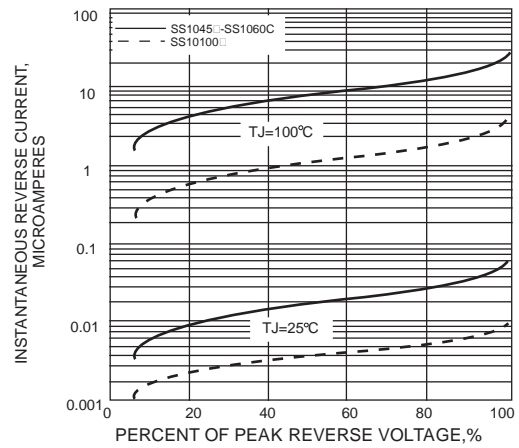
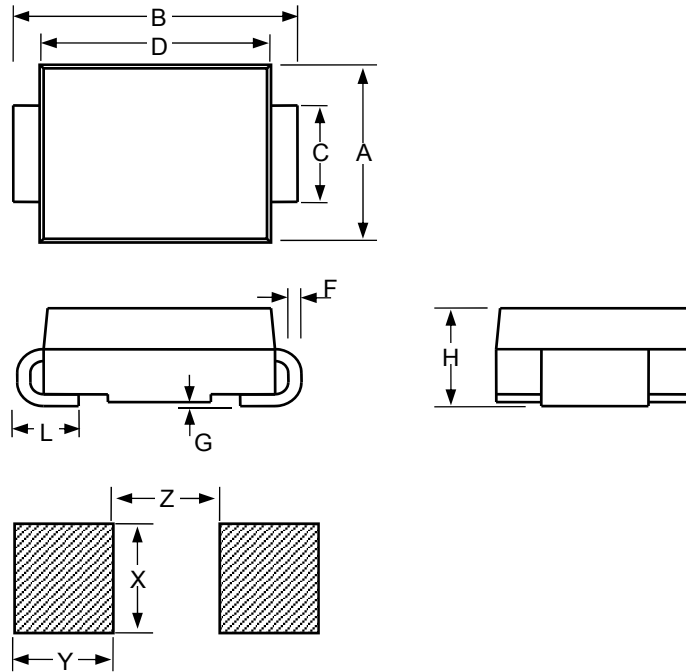


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

»Package Information - SMC



SMC						
Dimension	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.22		0.245	5.59		6.22
B	0.305		0.32	7.75		8.13
C	0.114		0.126	2.9		3.2
D	0.26		0.28	6.6		7.11
F	0.006		0.012	0.15		0.305
G	-		0.008	-		0.203
H	0.087		0.11	2.2		2.8
L	0.03		0.06	0.76		1.52
X		0.15			3.82	
Y		0.119			3.03	
Z		0.151			3.84	