

RoHS Compliant Product
A suffix of "-C" specifies halogen-free and RoHS Compliant

FEATURES

- Ideal For Surface Mount Applications
- Easy Pick and Place
- Built-In Strain Relief
- Low Forward Voltage Drop

MECHANICAL DATA

- Metallurgically Bonded Construction
- Polarity: Color Band Denotes Cathode End
- Case: Molded Plastic
- Epoxy: UL94-V0 Rate Flame Retardant

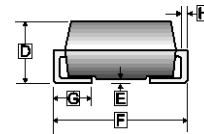
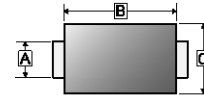
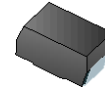
PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

ORDER INFORMATION

Part Number	Type
SM220A-C~SM2100A-C	Lead (Pb)-free and Halogen-free

SMA



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.23	1.65	E	-	0.3
B	3.99	4.75	F	4.70	5.28
C	2.30	2.90	G	0.75	1.52
D	1.90	2.62	H	0.15	0.31

Cathode  Anode

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number				Unit
		SM220A-C	SM240A-C	SM260A-C	SM2100A-C	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	100	V
Working Peak Reverse Voltage	V_{RWM}	20	40	60	100	V
Maximum DC Blocking Voltage	V_R	20	40	60	100	V
Maximum Instantaneous Forward Voltage @2A	V_F	0.45	0.52	0.65	0.83	V
Maximum Average Forward Rectified Current, See Fig.1	I_o	2				A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50				A
Maximum Reverse Current ²	$T_A=25^\circ\text{C}$	0.2				mA
	$T_A=100^\circ\text{C}$	10				
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	55				°C/W
Thermal Resistance Junction-Case	$R_{\theta JC}$	20				
Diode Junction Capacitance (Typ.) ¹	C_J	170				pF
Operating Junction Temperature Range	T_J	-55~125		-55~150		°C
Storage Temperature Range	T_{STG}	-55~150				

Notes:

1. $f=1\text{MHz}$ and applied 4V DC reverse voltage.
2. Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2\%$.

RATINGS AND CHARACTERISTIC CURVES

Typical Forward Current Derating Curve

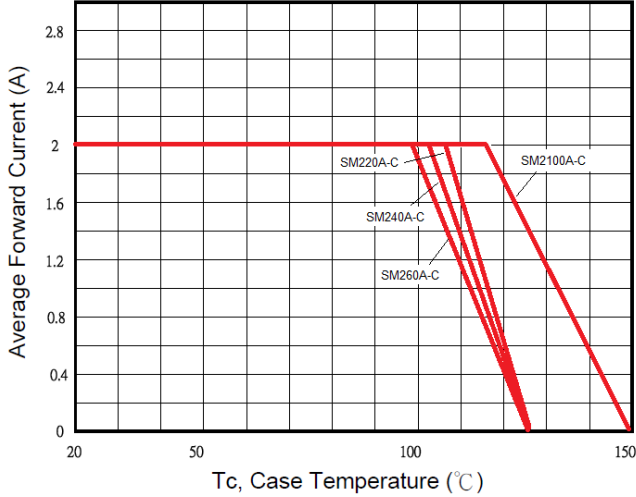


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

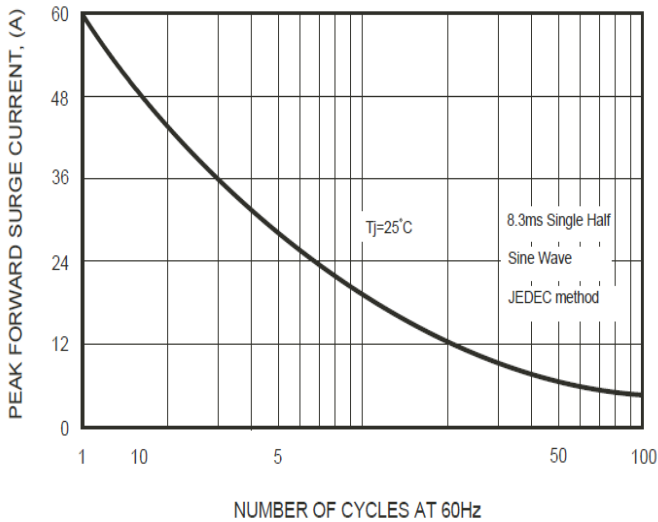


FIG.4-TYPICAL JUNCTION CAPACITANCE

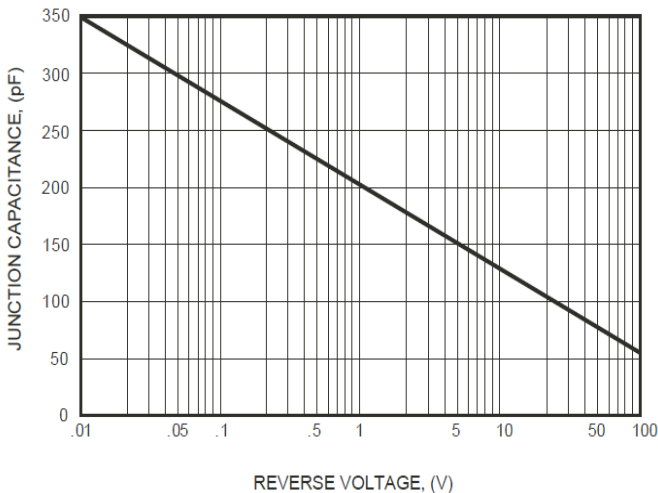


FIG.2 TYPICAL FORWARD CHARACTERISTIC

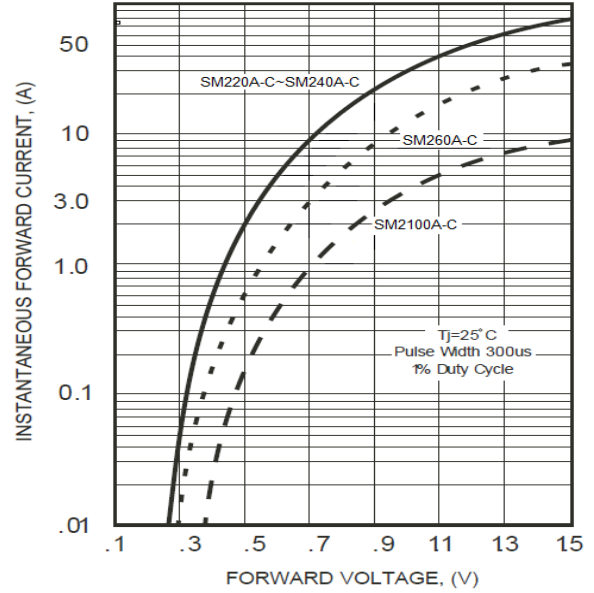


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

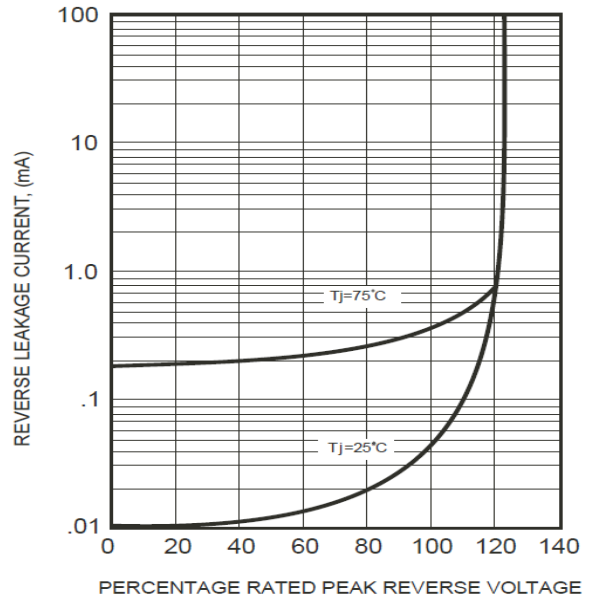
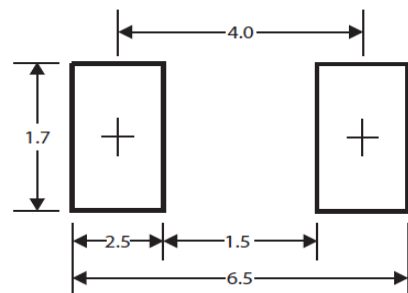


FIG.6-MOUNTING PAD LAYOUT



*Dimensions in millimeters