

RoHS Compliant Product

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

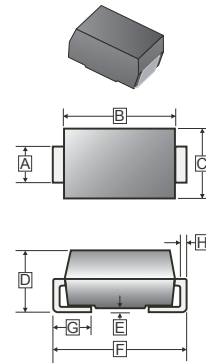
FEATURES

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop

PACKAGING INFORMATION

- Metallurgically bonded construction
- Polarity: Color band denotes cathode end
- Case: Molded plastic
- Epoxy: UL94-V0 rate flame retardant
- Weight: 0.060 grams (approximately)

SMA



PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.25	1.65	E	0.051	0.203
B	3.99	4.60	F	4.78	5.28
C	2.50	2.90	G	0.76	1.52
D	1.98	2.44	H	0.152	0.305

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25C 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	SM240A	SM260A	SM2100A	
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 @ 2.0A	V_F	0.45	0.52	0.65	0.83	V
Maximum Average Forward Rectified Current, See Fig.1	I_O	2.0				A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50				A
Maximum Reverse Current ⁴	I_R	$T_A=25^\circ\text{C}$	0.2			mA
		$T_A=100^\circ\text{C}$	10			
Typical Thermal Resistance ³	$R_{\theta JA}$	55				$^\circ\text{C} / \text{W}$
Typical Thermal Resistance ²	$R_{\theta JC}$	20				$^\circ\text{C} / \text{W}$
Diode Junction Capacitance (Typ.) ¹	C_J	170				pF
Storage and Operating Temperature Range	T_{STG}, T_J	-50 ~ 150, -60 to 175				$^\circ\text{C}$

Note:

1. $f=1\text{MHz}$ and applied 4V DC reverse voltage
2. Thermal Resistance Junction to Case.
3. Thermal Resistance Junction to Ambient.
4. Pulse Test : Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.

RATINGS AND CHARACTERISTIC CURVES

Typical Forward Current Derating Curve

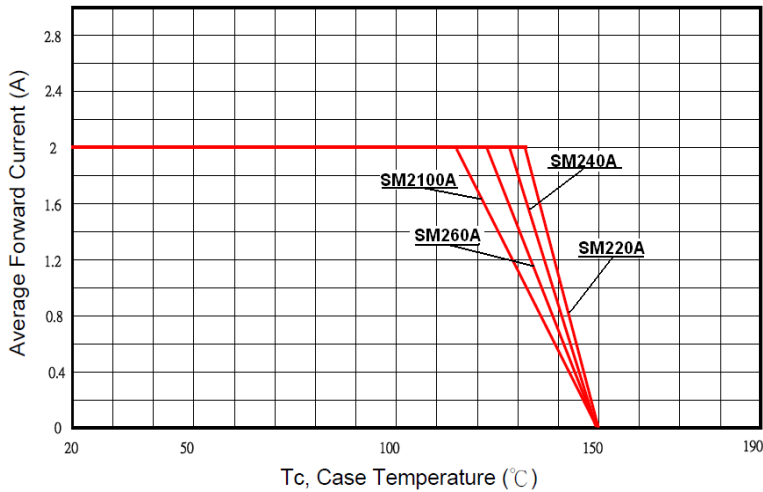


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

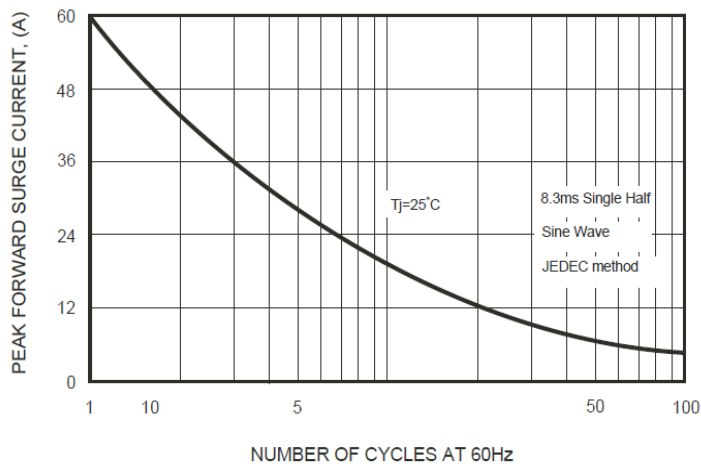


FIG.4-TYPICAL JUNCTION CAPACITANCE

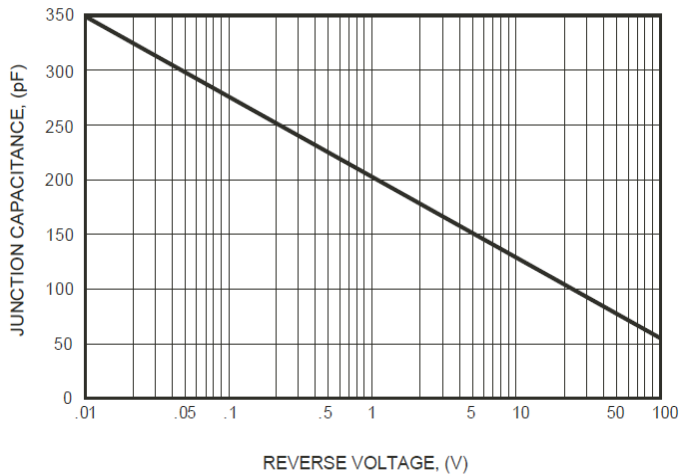


FIG.2 TYPICAL FORWARD CHARACTERISTIC

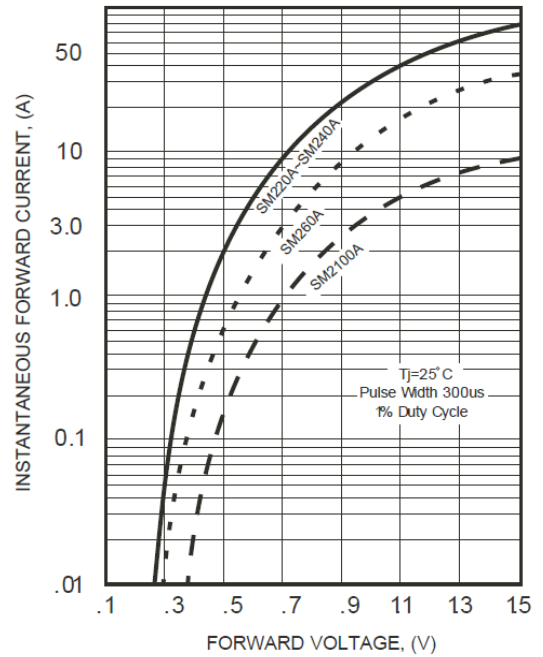


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

