

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

FEATURES

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 60mg (Approx.)

MARKING

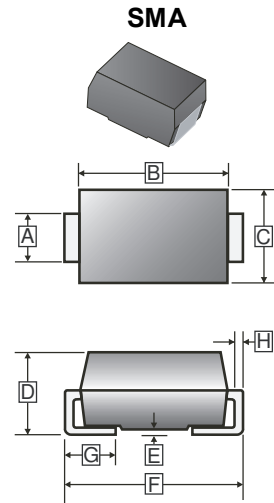
SS24

PACKAGE INFORMATION

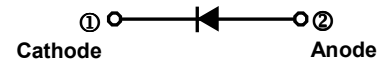
Package	MPQ	Leader Size
SMA	5K	13 inch

ORDER INFORMATION

Part Number	Type
SM240AR-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.24	1.65	E	-	0.203
B	3.99	4.75	F	4.80	5.28
C	2.40	2.90	G	0.76	1.52
D	1.90	2.44	H	0.15	0.31



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, derate by 20%)

Parameter	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current	I_F	2	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50	A
Maximum Instantaneous Forward Voltage @ $I_F=2A$	V_F	0.55	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	$T_A=25^{\circ}C$	0.5
		$T_A=100^{\circ}C$	5
Typical Junction Capacitance ¹	C_J	220	pF
Typical Thermal Resistance ²	$R_{\theta JA}$	80	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-55~150	°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C.
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

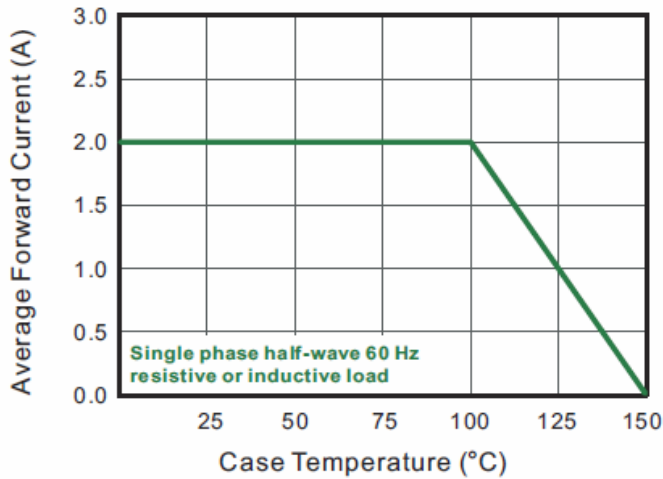


Fig.2 Typical Reverse Characteristics

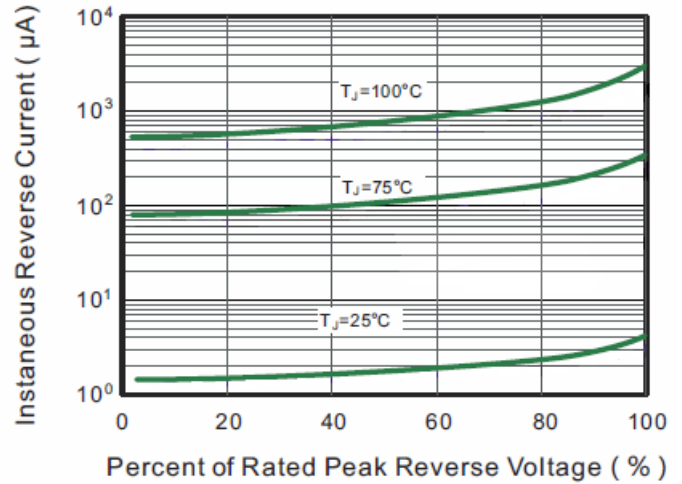


Fig.3 Typical Forward Characteristic

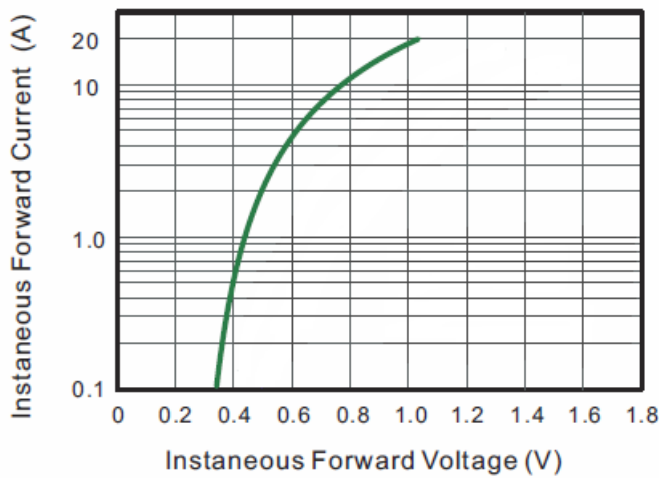


Fig.4 Typical Junction Capacitance

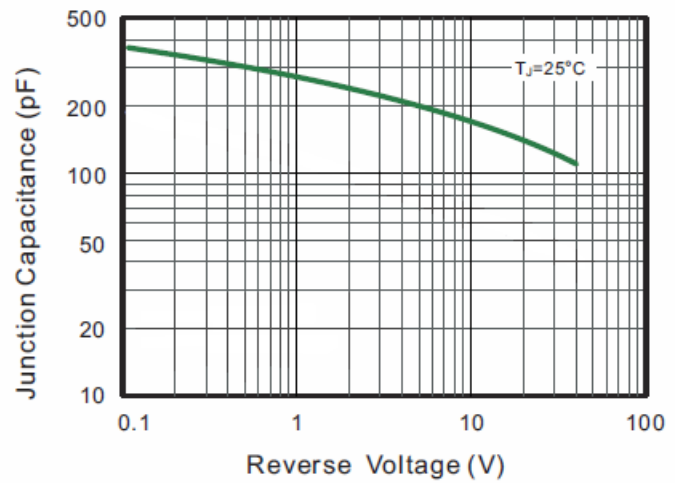


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

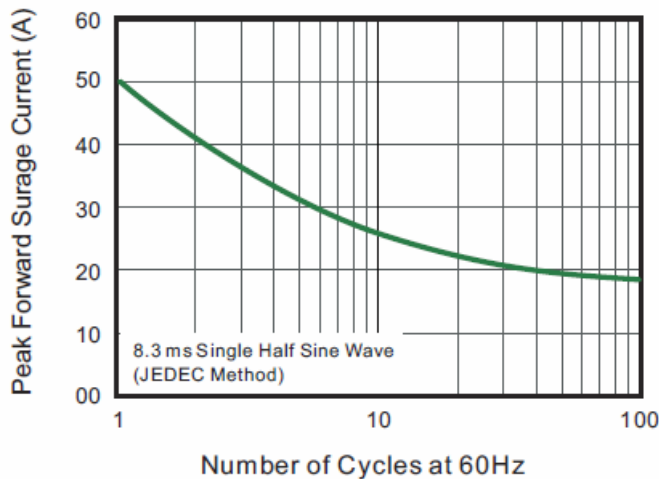


Fig.6- Typical Transient Thermal Impedance

