Elektronische Bauelemente

SM4001AR-C~SM4007AR-C

Voltage 50~1000V

1Amp Surface Mount Silicon Rectifiers

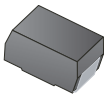
RoHS Compliant Product

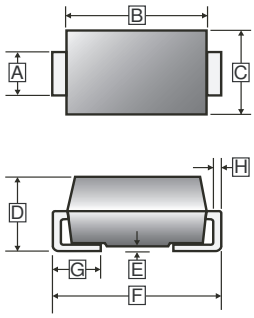
A suffix of “-C” specifies halogen & lead-free

FEATURES

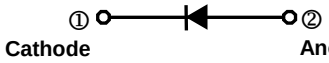
- For Surface Mounted Applications
- Low Profile Package
- Glass Passivated Chip Junction
- Easy to Pick and Place

SMA





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.24	1.65	E	-	0.3
B	3.99	4.75	F	4.80	5.28
C	2.30	2.90	G	0.76	1.52
D	1.90	2.62	H	0.15	0.31



MECHANICAL DATA

- Terminals: Solderable per MIL-STD-750, Method 2026

MARKING

S1M

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

ORDER INFORMATION

Part Number	Type
SM4001AR-C~SM4007AR-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25℃ ambient temperature unless otherwi se specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%)

Parameter		Symbol	Part Number							Unit
			SM4001 AR-C	SM4002 AR-C	SM4003 AR-C	SM4004 AR-C	SM4005 AR-C	SM4006 AR-C	SM4007 AR-C	
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	1							A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rated Load		I_{FSM}	30							A
Maximum Instantaneous Forward Voltage @1A		V_F	1.1							V
Maximum DC Reverse Current @Rated DC Blocking Voltage	T_A=25℃	I_R	5							μA
	T_A=125℃		50							
Typical Junction Capacitance [1]		C_J	15							pF
Typical Thermal Resistance [2]		$R_{\theta JA}$	75							℃/W
Operating & Storage Temperature		T_J, T_{STG}	-55~150							℃

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V D.C.
2. P.C.B. mounted with 2"X2" (5X5cm) copper pad areas.

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

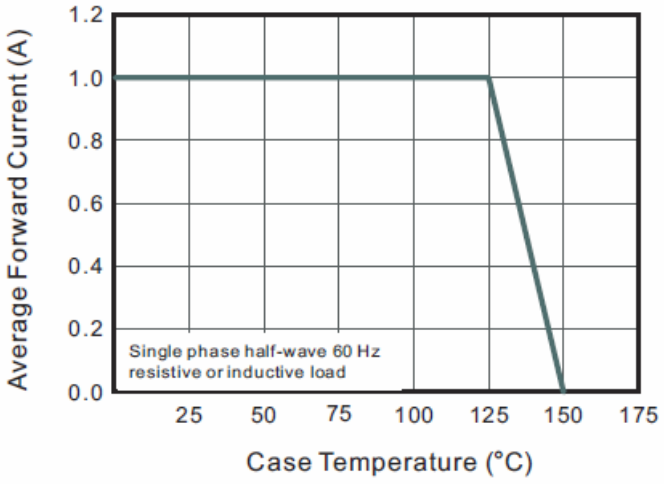

Fig.2 Typical Reverse Characteristics

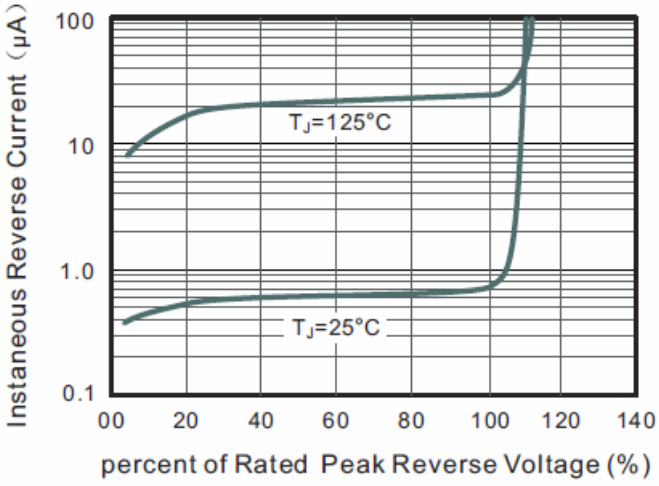

Fig.3 Typical Forward Characteristic

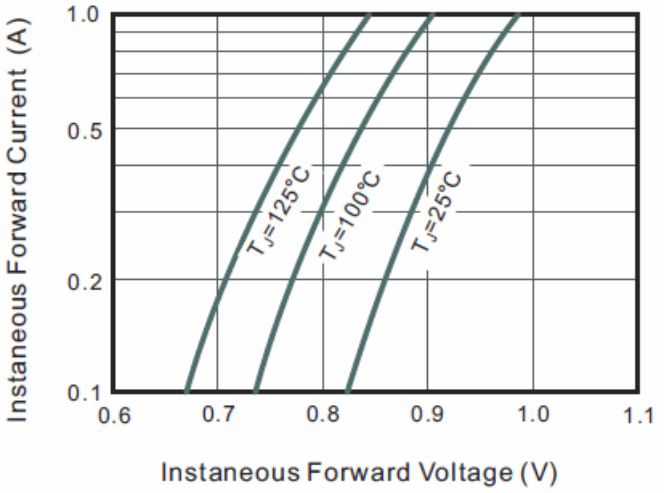

Fig.4 Typical Junction Capacitance

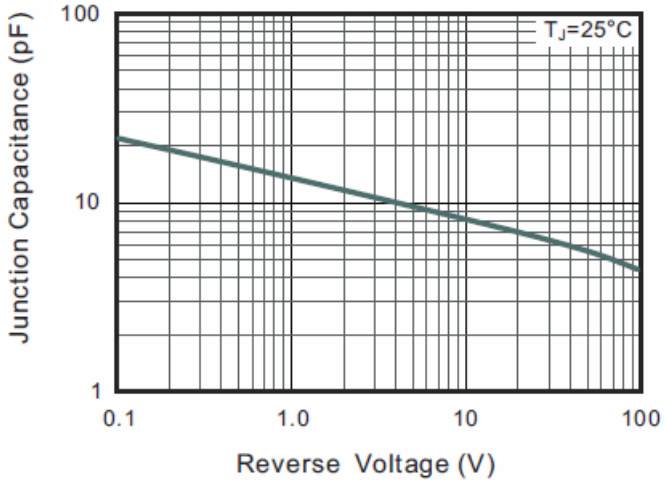

Fig.5 Maximum Non-Repetitive Peak Forward Surage Current