

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

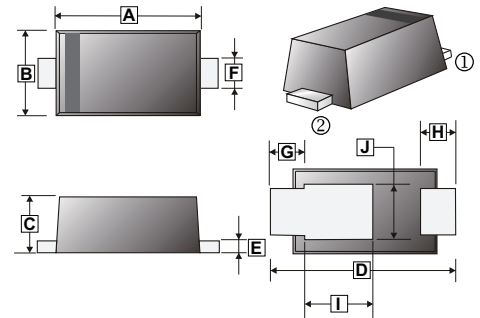
FEATURES

- Schottky barrier rectifier
- Guardring protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance

MECHANICAL DATA

- Case: SOD-123T molded plastic body
- Polarity: Color band denotes cathode end
- Mounting position: Any

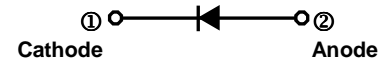
SOD-123T



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	2.90	F	0.70	0.90
B	1.75	1.95	G	0.75	0.85
C	0.90	1.00	H	0.75	0.85
D	3.60	3.80	I	1.28	1.32
E	0.20	Typ.	J	1.08	1.12

MARKING

Part Number	Marking
SM14T	S4
SM16T	S6
SM110T	SA



PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123T	3K	7 inch

MAXIMUM RATINGS (T_A=25°C unless otherwise specified.)

Parameter	Symbol	Part Number			Unit
		SM14T	SM16T	SM110T	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	60	100	V
Maximum RMS Voltage	V _{RMS}	28	42	70	V
Maximum Reverse Voltage	V _R	40	60	100	V
Maximum Forward Voltage @ I _{FM} =1A ¹	V _F	0.50	0.75	0.85	V
Maximum Forward Rectified Current @ T _L =90°C	I _{F(AV)}	1			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	40			A
Maximum Reverse Current	I _R	0.2		0.5	mA
		6	5		
Maximum Thermal Resistance	R _{θJL}	28			°C/W
Operating & Storage Temperature Range	T _J , T _{STG}	-55~125, -55~150			°C

Note:

1. Pulse test : Pulse width 300µs, duty cycle 1%

CHARACTERISTIC CURVES

FIG.1 – FORWARD DERATING CURVE

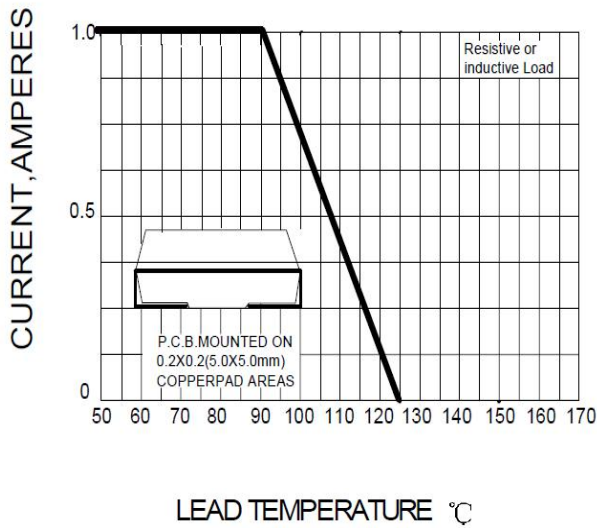


FIG.2– PEAK FORWARD SURGE CURRENT

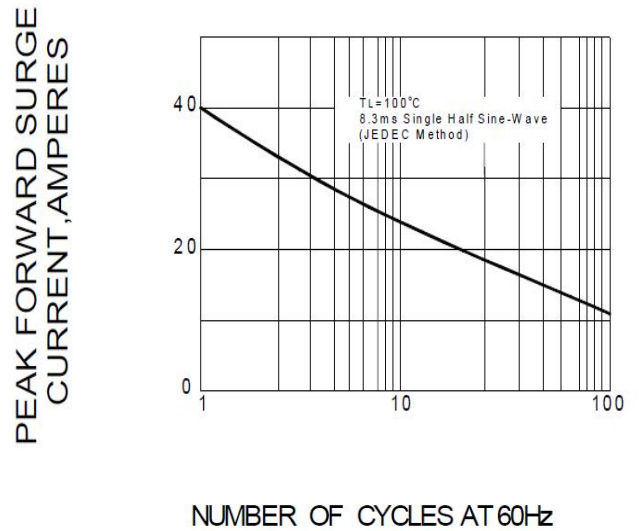


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

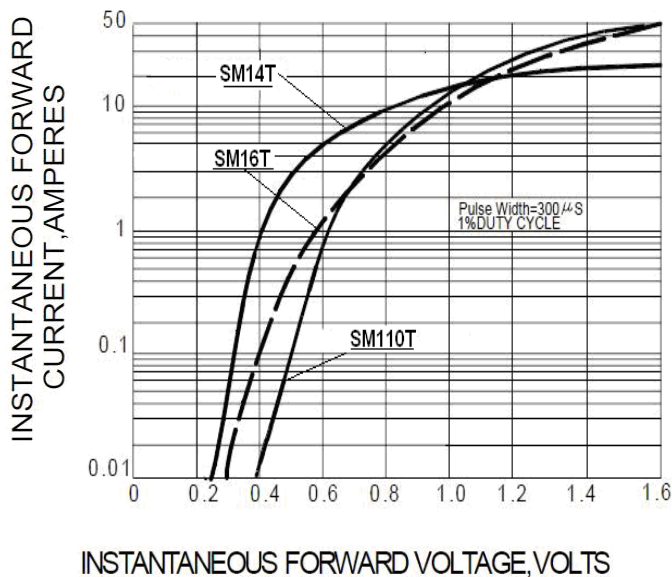


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

