

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

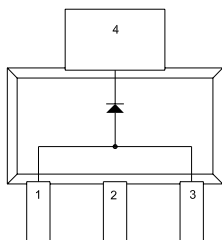
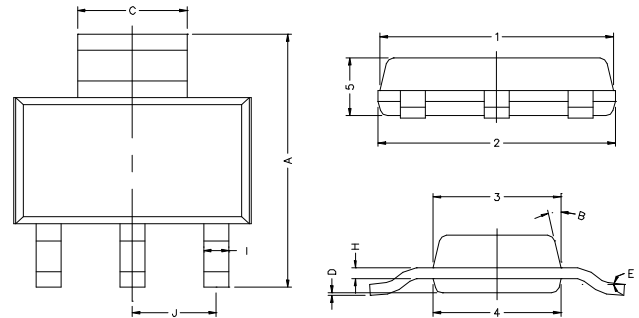
SOT-223

FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Epitaxial construction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: As Marked
- * Mounting position: Any
- * Weight: 1.0 grams(Approximately)



LEAD CODE:

- 1) ANODE
- 2) CATHODE
- 3) ANODE
- 4) CATHODE

Pin 1 and Pin 3 are common.
Pin 2 and Pin 4 are common.

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.70	7.30	B	13°TYP.	
C	2.90	3.10	J	2.30 REF.	
D	0.02	0.10	1	6.30	6.70
E	0°	10°	2	6.30	6.70
I	0.60	0.80	3	3.30	3.70
H	0.25	0.35	4	3.30	3.70
			5	1.40	1.80

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, derate current by 20%.

TYPE NUMBER	SM540ZT	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Working Peak Reverse Voltage	40	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current See Fig. 1	5	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	125	A
Maximum Instantaneous Forward Voltage (I _F = 5 Amps)	0.55	V
Maximum DC Reverse Current Ta=25°C	0.2	mA
at Rated DC Blocking Voltage Ta=125°C	30	
Typical Junction Capacitance (Note1)	380	pF
Typical Thermal Resistance RθJC (Note 2)	25	°C/W
Operating Temperature Range T _J	-50 ~ +150	°C
Storage Temperature Range T _{STG}	-65 ~ +175	°C

NOTES:

- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

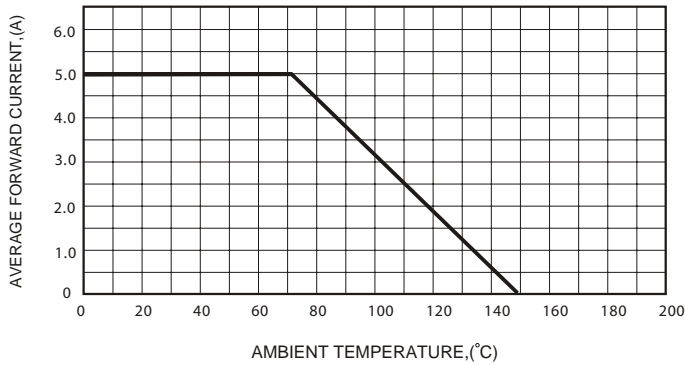


FIG.2-TYPICAL FORWARD CHARACTERISTICS

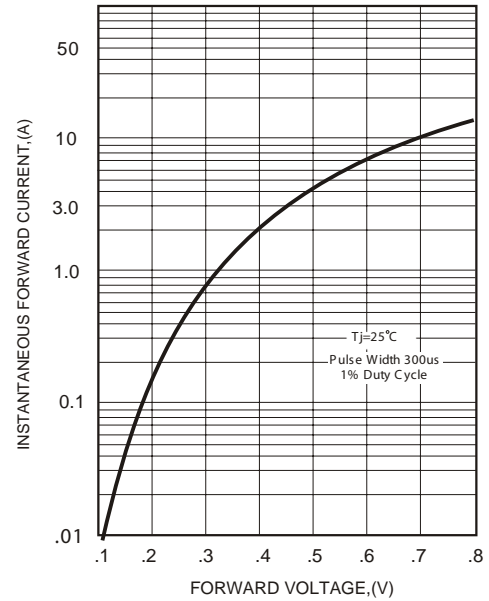


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

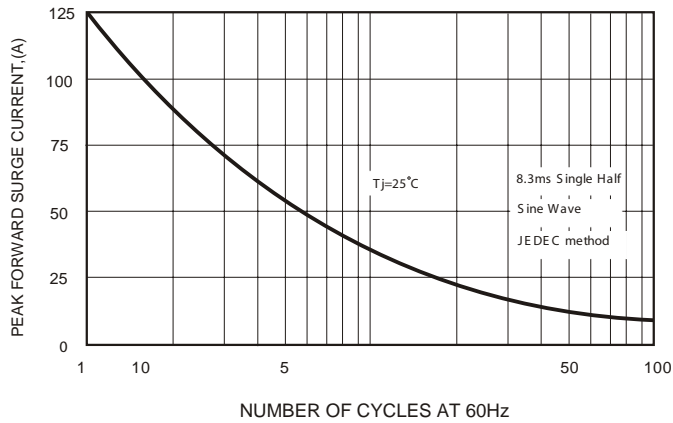


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

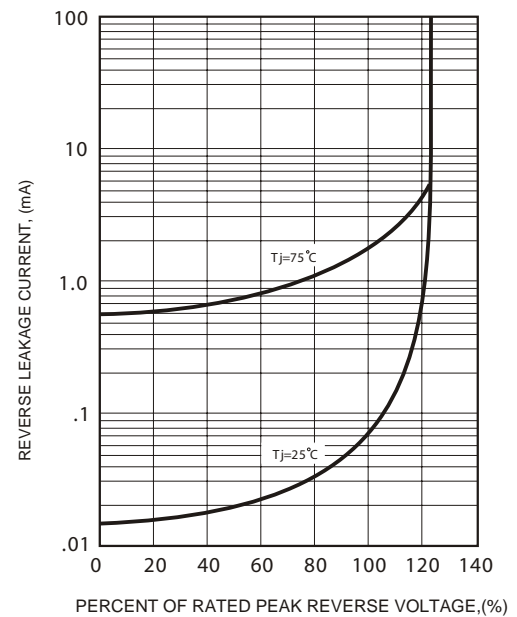


FIG.4-TYPICAL JUNCTION CAPACITANCE

