

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

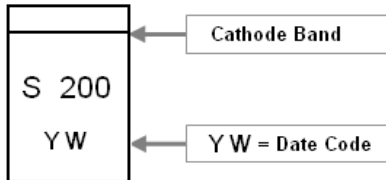
FEATURES

- Low power loss, high efficiency
- Low leakage, Low forward voltage drop
- High current capability
- High speed switching
- High surge capability
- High reliability
- Anti-ESD

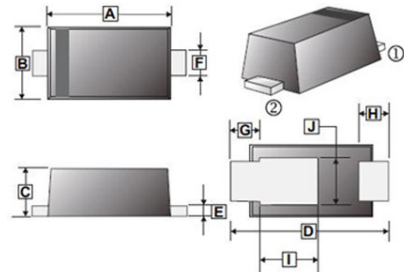
MECHANICAL DATA

- Epoxy: Device has UL flammability classification 94V-0
- Mounting position: Any
- Polarity: Color band denotes cathode end
- Flat lead frame

MARKING



SOD-123T



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.7	2.9	F	0.7	0.9
B	1.75	1.95	G	0.75	0.85
C	0.9	1	H	0.75	0.85
D	3.6	3.8	I	1.28	1.32
E	0.2 Typ.				

PACKAGE INFORMATION

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

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

Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V _R RM	200	V
Maximum RMS Voltage	V _R MS	140	V
Maximum DC Blocking Voltage	V _{DC}	200	V
Maximum Average Forward Rectified Current @T _A =75°C	I _O	1	A
Peak Forward Surge Current@8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	25	A
Typical Current Squared Time	I ² t	1.66	A ² S
Maximum Forward Voltage @1A	V _F	0.85	V
Maximum Average Reverse Current at Rated DC Blocking Voltage	T _A =25°C	0.2	mA
	T _A =100°C	2	
Total Capacitance ¹	C _T	75	pF
Typical Thermal Resistance ²	R _θ JL	30	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55~150	°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 Volts.
2. Thermal Resistance: Mounted on PCB.

CHARACTERISTIC CURVES

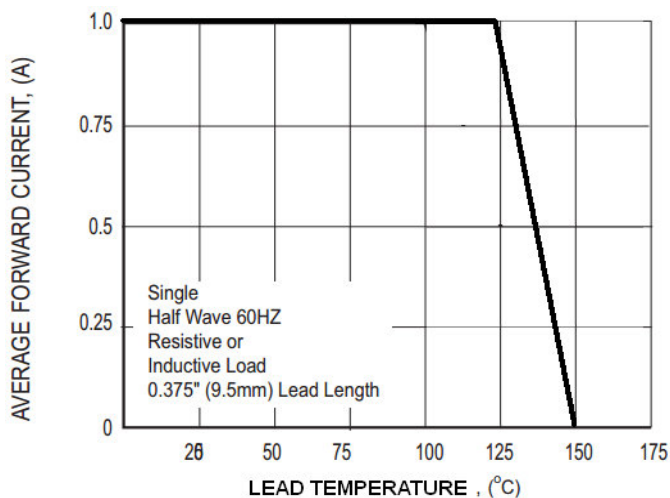


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

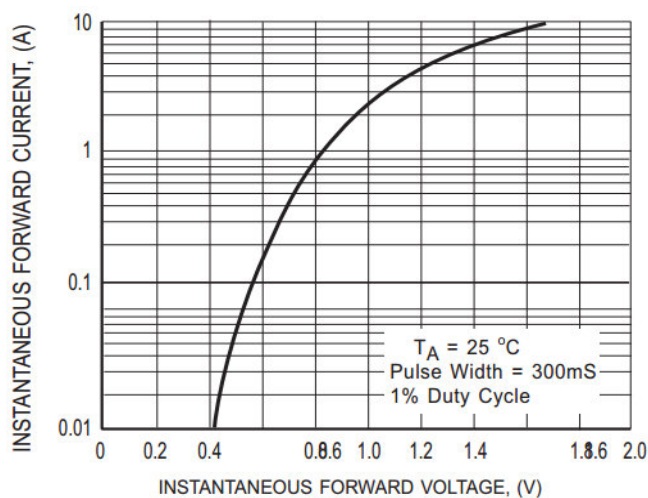


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

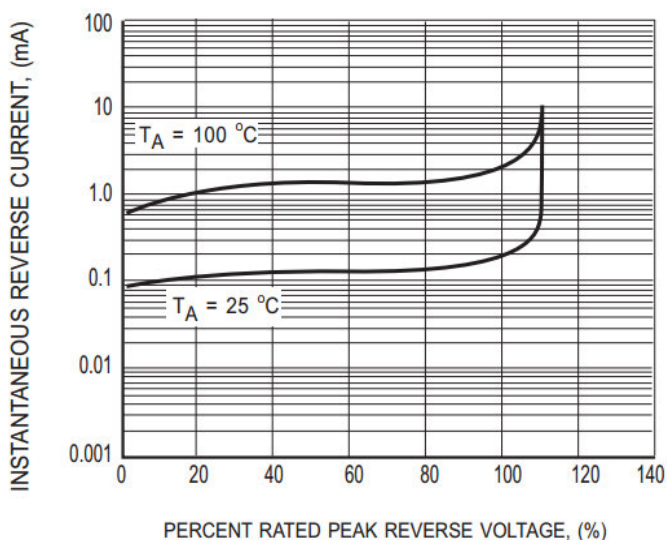


FIG.3 TYPICAL REVERSE CHARACTERISTICS

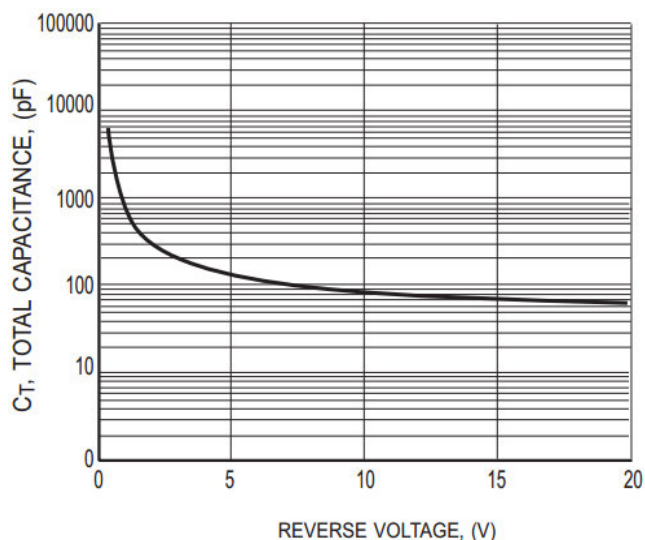


FIG.4 TYPICAL TOTAL CAPACITANCE

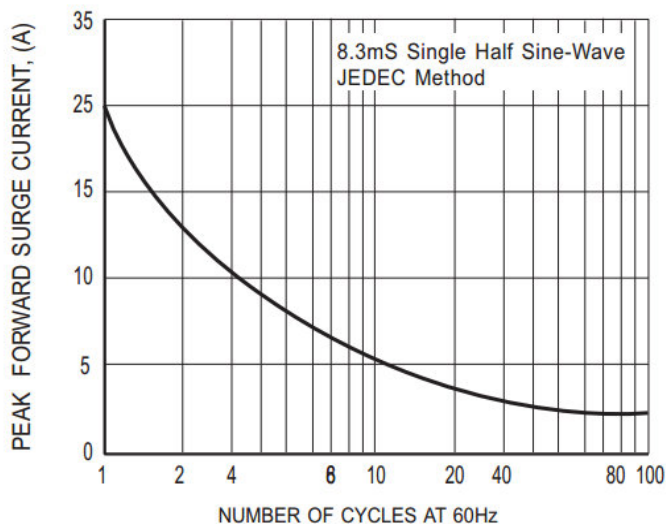


FIG.5 TYPICAL REVERSE CHARACTERISTICS