

RoHS Compliant Product

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

## FEATURES

- High current density
- Low power losses
- High efficiency
- Low forward voltage drop

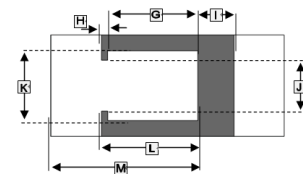
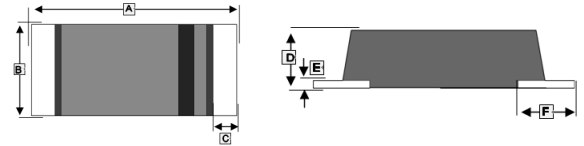
## MARKING

3LP

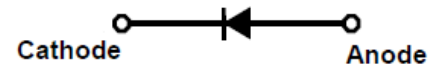
## PACKAGE INFORMATION

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

## SOD-123HT



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.3	3.7	H	0.6 TYP.	
B	1.4	1.8	I	0.6	0.8
C	0.3 TYP.		J	0.75	0.85
D	0.6	1.0	K	1.0	1.2
E	0.1 TYP.		L	1.1	1.3
F	0.8 TYP.		M	1.9	2.1
G	1.0	1.2			



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	45	V
Maximum RMS Voltage	V <sub>RMS</sub>	31.5	V
Maximum Continuous Reverse Voltage	V <sub>R</sub>	45	V
Maximum Average Forward Rectified Current	I <sub>O</sub>	3	A
Non-Repetitive Peak Forward Surge Current@ 1 ms square-wave	I <sub>FSM</sub>	80	A
Maximum Instantaneous Forward Voltage@ I <sub>F</sub> =3A	V <sub>F</sub>	0.45	V
Maximum Reverse Leakage Current at Rated V <sub>R</sub>	I <sub>R</sub>	T <sub>J</sub> =25°C	0.5
		T <sub>J</sub> =100°C	20
Typical Thermal Resistance from Junction to Ambient <sup>1</sup>	R <sub>θJA</sub>	75	°C / W
Typical Thermal Resistance from Junction to Case <sup>1</sup>	R <sub>θJC</sub>	35	°C / W
Operating Junction and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	125, -65~175	°C

Notes:

1. The device is mounted on a FR-4 PCB with a recommended minimum copper pad.

**CHARACTERISTIC CURVES**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

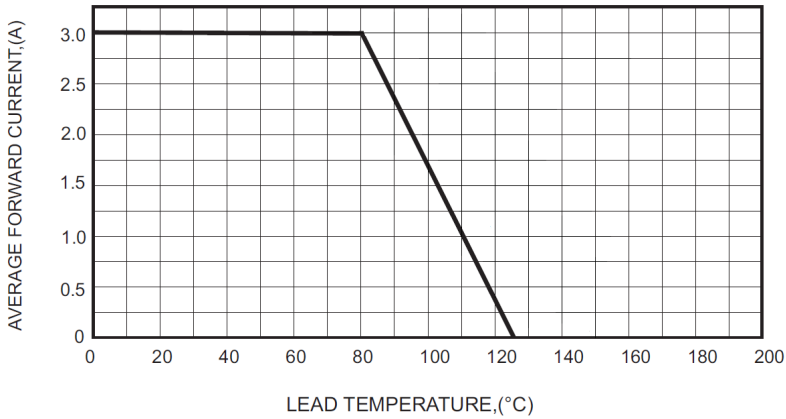


FIG.2-TYPICAL FORWARD CHARACTERISTICS

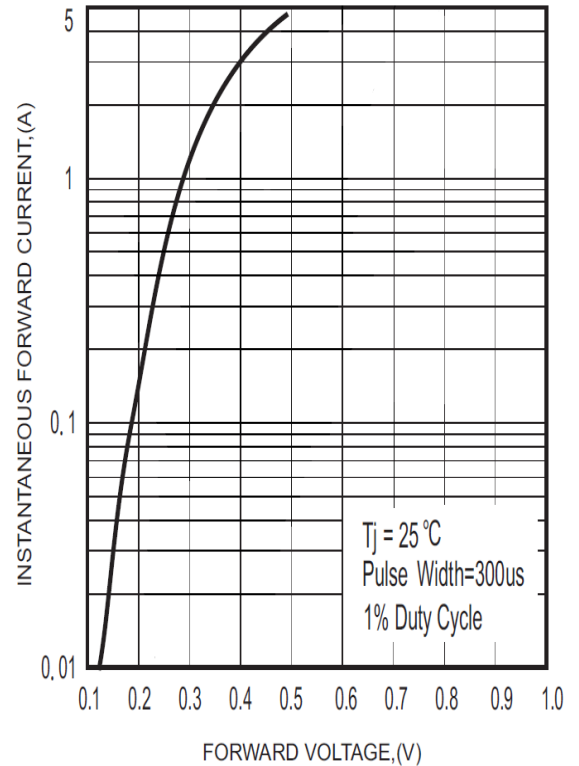


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

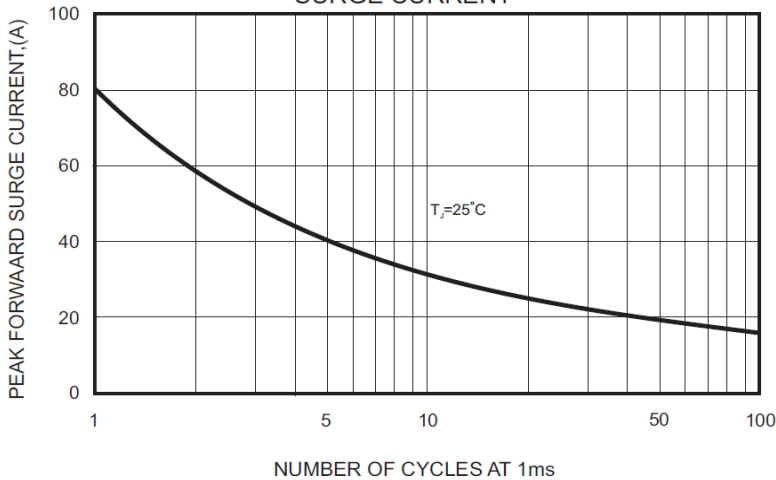


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

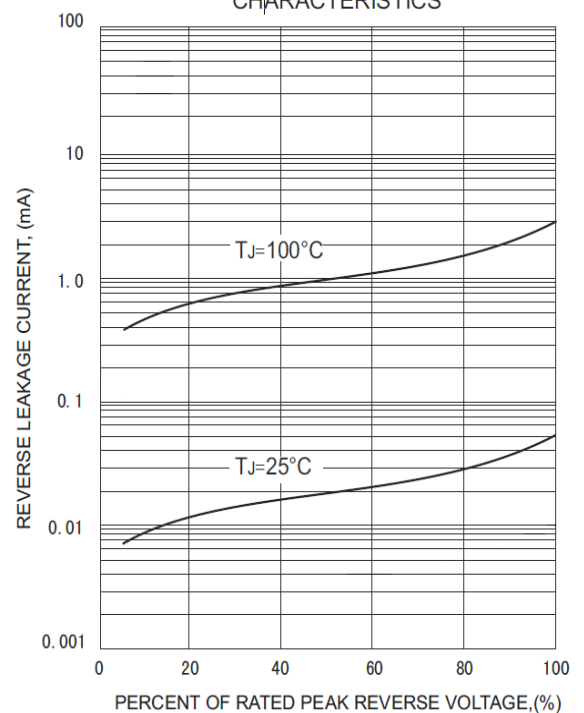


FIG.4-TYPICAL JUNCTION CAPACITANCE

