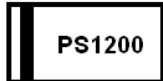


RoHS Compliant Product
A suffix of "-C" specifies halogen-free

FEATURES

- Heatsink structure
- Low profile, typical thickness 0.8mm
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 se conds

MARKING



↑
Cathode

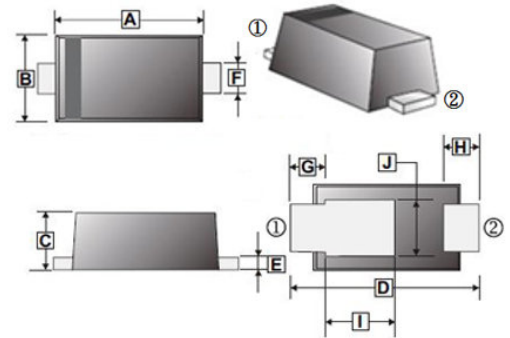
PACKAGE INFORMATION

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

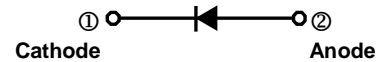
ORDER INFORMATION

Part Number	Type
SM1150DT-C	Lead (Pb)-free and Halogen-free

SOD-123DT



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.9	3.1	F	0.85	1.05
B	1.9	2.1	G	0.6 REF.	
C	0.75	0.9	H	0.4	0.85
D	3.5	3.9	I	1.66 REF.	
E	0.1	0.25	J	1.3	1.7



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	150	V
Maximum RMS Voltage	V _{RMS}	105	V
Maximum DC Blocking Voltage	V _{DC}	150	V
Minimum Breakdown Voltage @I _R =1mA	V _{BR}	150	V
Maximum Average Forward Rectified Current	I _F	1	A
Peak Forward Surge Current @8.3ms single half sine-wave Superimposed on rate load	I _{FSM}	40	A
Maximum Instantaneous Forward Voltage	I _F =0.5A	0.8	V
	I _F =1A	0.85	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	2	uA
	T _A =125°C	200	
Typical Thermal Resistance from Junction-Ambient ¹	R _{θJA}	65	°C/W
Typical Thermal Resistance from Junction-Case ²	R _{θJC}	35	
Typical Thermal Resistance from Junction-Lead ¹	R _{θJL}	9	
Operating Junction & Storage Temperature	T _J , T _{STG}	-55~150	°C

Notes:

1. The thermal resistance from junction to ambient or lead, mounted on P.C.B with 5x5mm copper pads, 2oz FR-4 PCB.
2. The thermal resistance from junction to case, mounted on P.C.B with recommended copper pads, 2oz FR-4 PCB.

CHARACTERISTIC CURVES

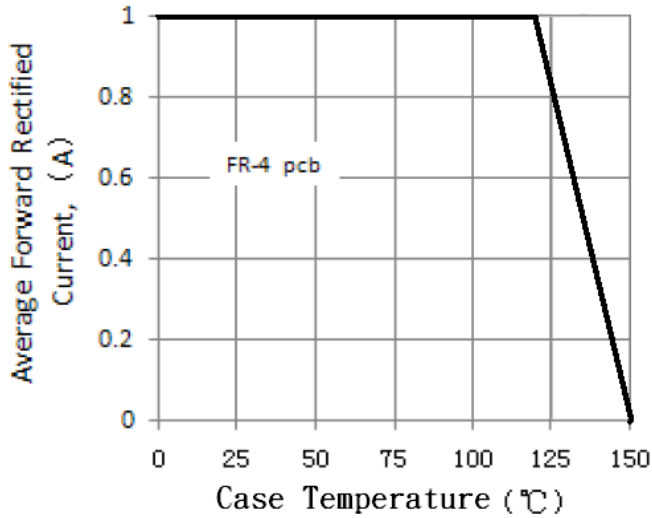


Figure 1. Forward Current Derating Curve

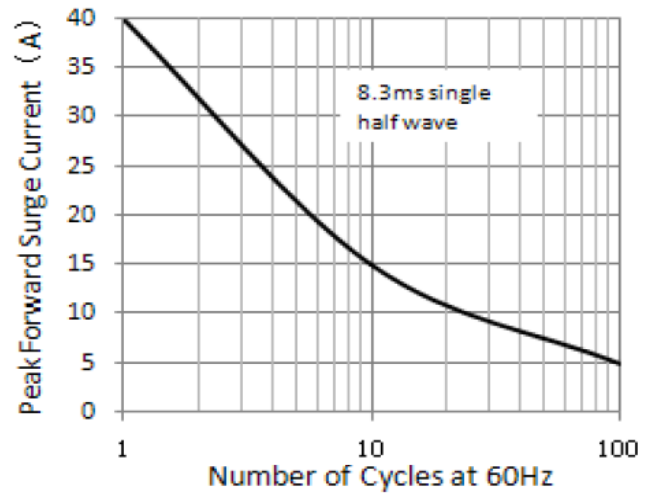


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

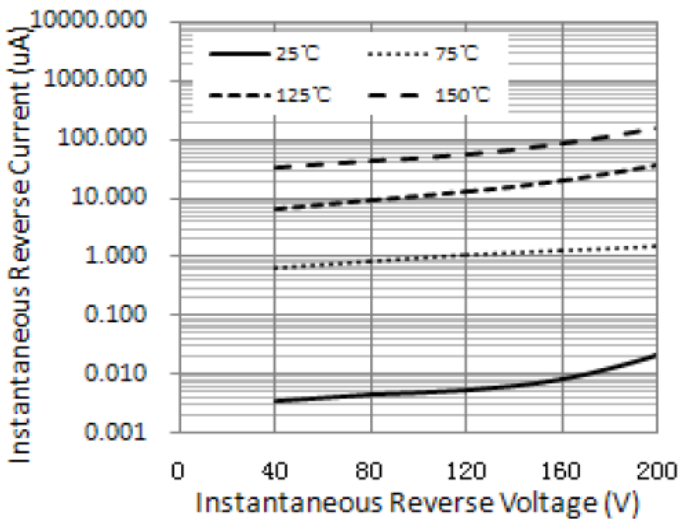


Figure 3. Typical Instantaneous Reverse Characteristics

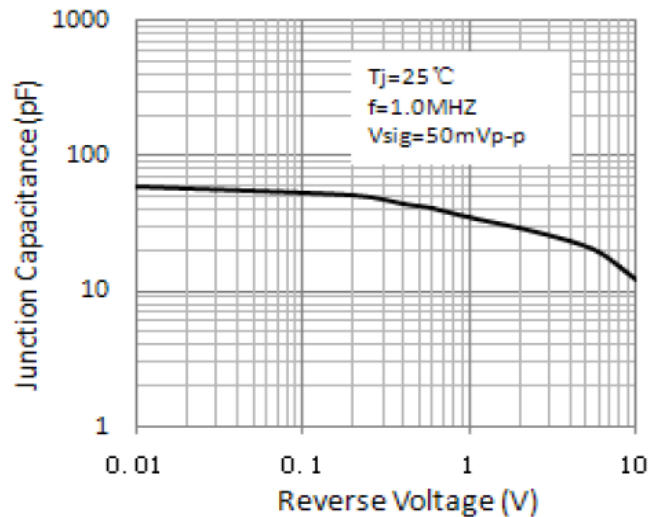


Figure 4. Typical Junction Capacitance

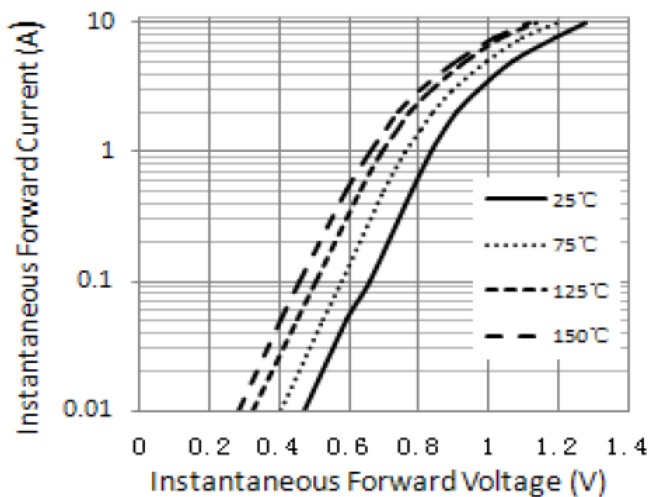
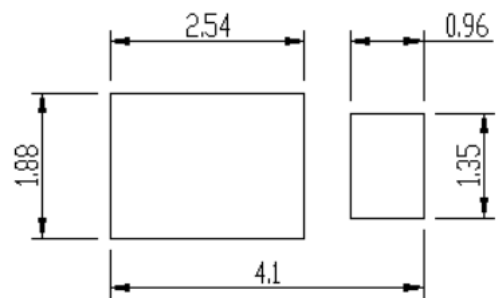


Figure 5. Typical Instantaneous Forward Characteristics



*Dimensions in millimeters

Figure 6. Mounting Pad Layout