

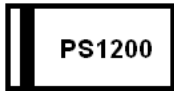
RoHS Compliant Product

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

FEATURES

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

MARKING



↑
Cathode

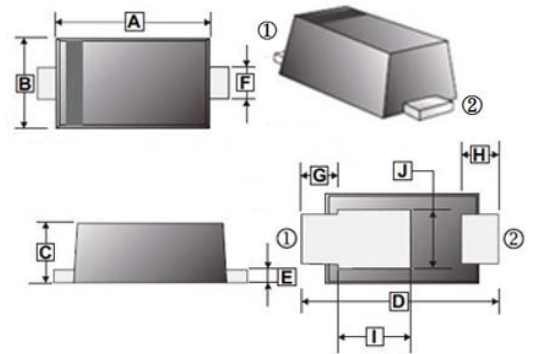
PACKAGE INFORMATION

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

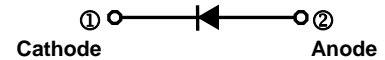
ORDER INFORMATION

Part Number	Type
SM1150DT	Lead (Pb)-free
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@ 8.3 ms single half sine-wave Superimposed on rate load	I _{FSM}	40	A
Maximum Instantaneous Forward Voltage	V _F	I _F =0.5A	0.8
		I _F =1A	0.85
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _A =25°C	2
		T _A =125°C	200
Typical Thermal Resistance from Junction to Ambient ¹	R _{θJA}	65	°C / W
Typical Thermal Resistance from Junction to Case ²	R _{θJC}	35	
Typical Thermal Resistance from Junction to Lead ¹	R _{θJL}	9	
Operating Junction and 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 5×5mm copper pads,2 OZ,FR4 PCB.
2. The thermal resistance from junction to case, mounted on P.C.B with recommended copper pads,2 OZ,FR4 PCB.

CHARACTERISTIC CURVES

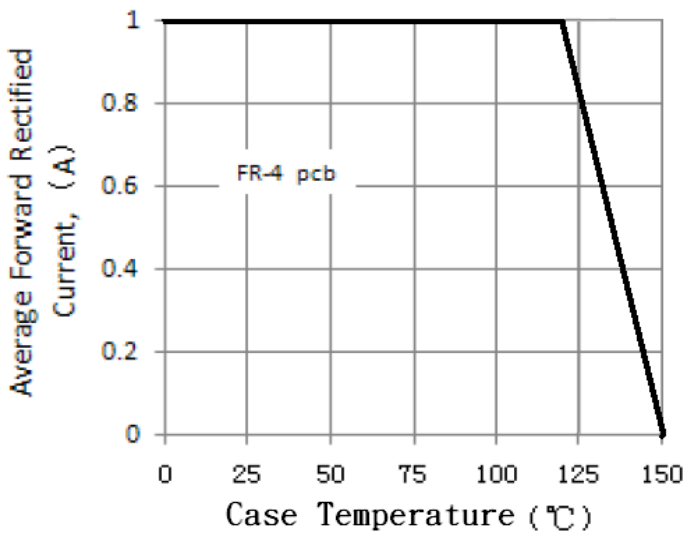


Figure 1. Forward Current Derating Curve

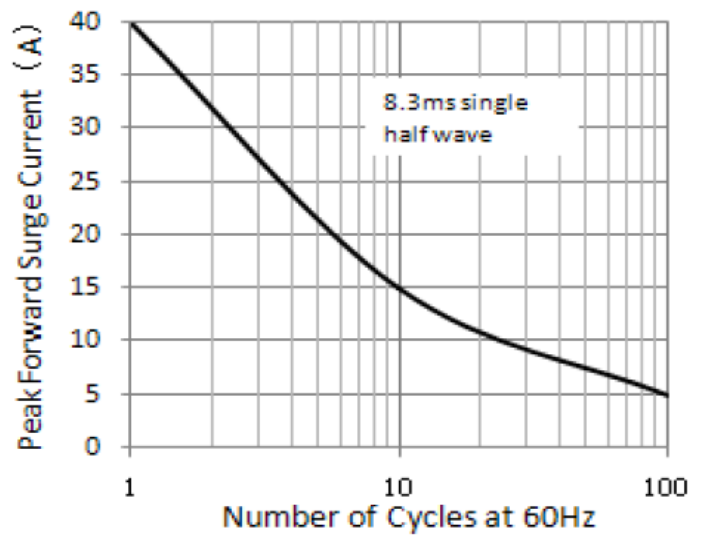


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

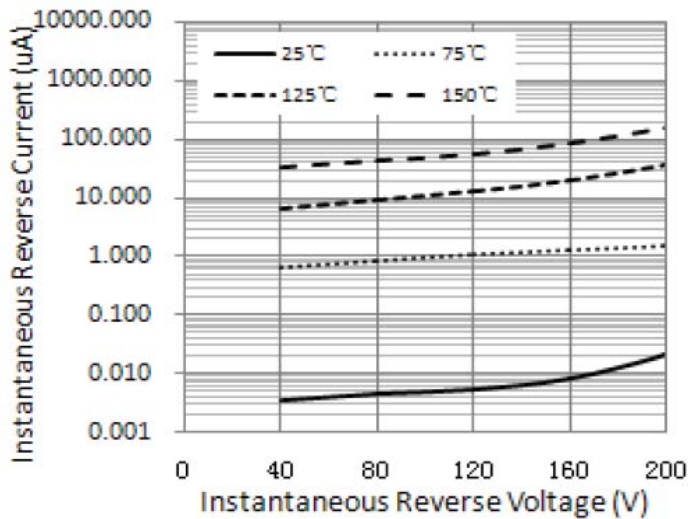


Figure 3. Typical Instantaneous Reverse Characteristics

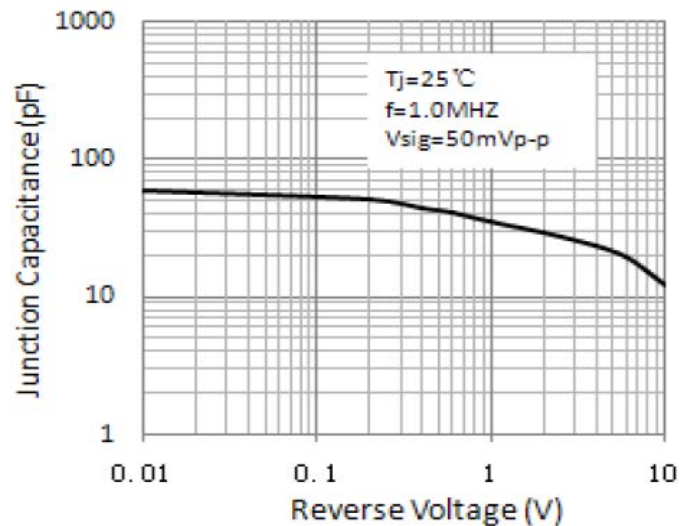


Figure 4. Typical Junction Capacitance

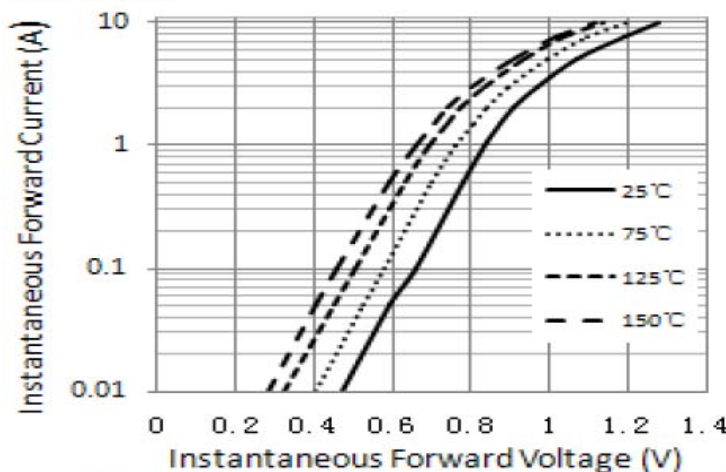


Figure 5. Typical Instantaneous Forward Characteristics