

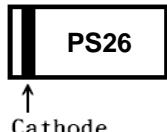
RoHS Compliant Product

A suffix of “-C” specifies halogen-free and RoHS Compliant

FEATURES

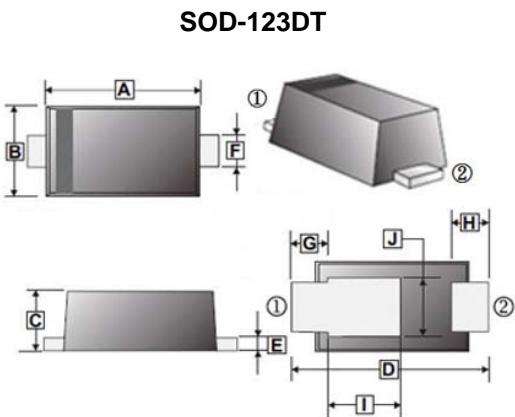
- Heatsink Structure
- Low Profile, Typical Thickness 0.8mm
- Low Forward Voltage Drop
- Super Low VF Schottky Barrier Diodes
- Moisture Sensitivity: Level 1, per J-STD-020
- High Temperature Soldering Guaranteed: 260°C/10 seconds

MARKING



PACKAGE INFORMATION

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



ORDER INFORMATION

Part Number	Type
SM260DT	Lead (Pb)-free
SM260DT-C	Lead (Pb)-free and Halogen-free

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 ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings		Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60		V	
Maximum RMS Voltage	V_{RMS}	42		V	
Maximum DC Blocking Voltage	V_{DC}	60		V	
Maximum Average Forward Rectified Current	I_F	2		A	
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rate Load	I_{FSM}	50		A	
Rating for Fusing ($t<8.3\text{ms}$)	I^2t	10		A^2s	
Maximum Instantaneous Forward Voltage @ $I_F=2\text{A}$	V_F	0.65		V	
		0.58			
Maximum DC Reverse Current @Rated DC Blocking Voltage	I_R	50		μA	
		15		mA	
Typical Junction Capacitance	C_J	95		pF	
Typical Thermal Resistance from Junction-Ambient ¹	$R_{\theta JA}$	60		$^\circ\text{C/W}$	
Typical Thermal Resistance from Junction-Case ²	$R_{\theta JC}$	28			
Typical Thermal Resistance from Junction-Lead ¹	$R_{\theta JL}$	6			
Operating Junction and Storage Temperature	T_J, T_{STG}	-55~150		$^\circ\text{C}$	

Notes:

1. The thermal resistance from junction-ambient or lead, mounted on P.C.B with 5x5mm copper pads, 2OZ, FR4 PCB.
2. The thermal resistance from junction-case, mounted on P.C.B with recommended copper pads, 2OZ, FR4 PCB.

CHARACTERISTIC CURVES

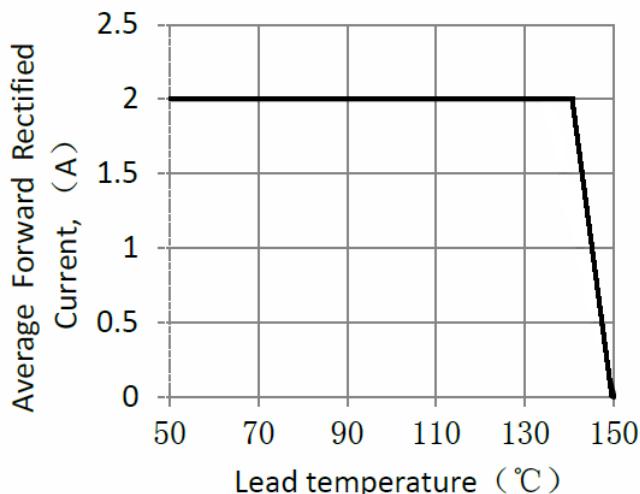


Figure 1. Forward Current Derating Curve

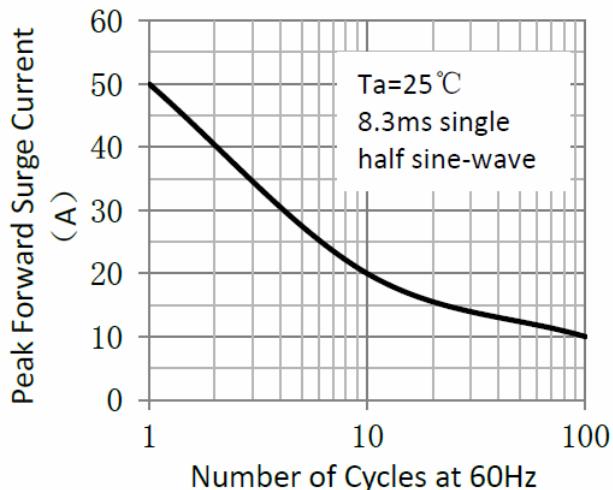


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

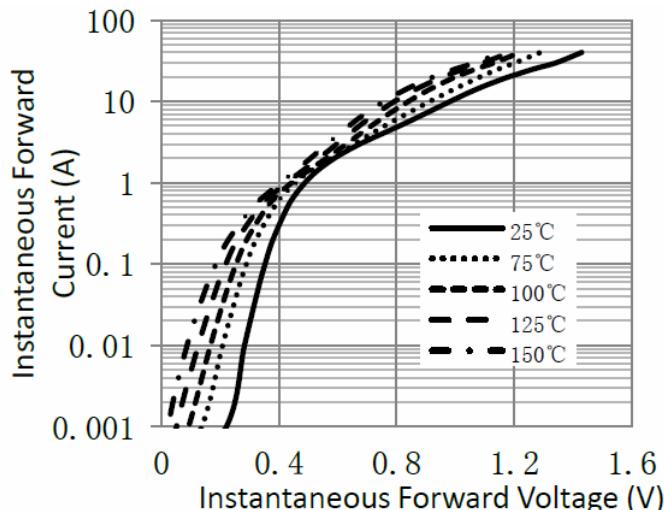


Figure 3. Typical Instantaneous Forward Characteristics

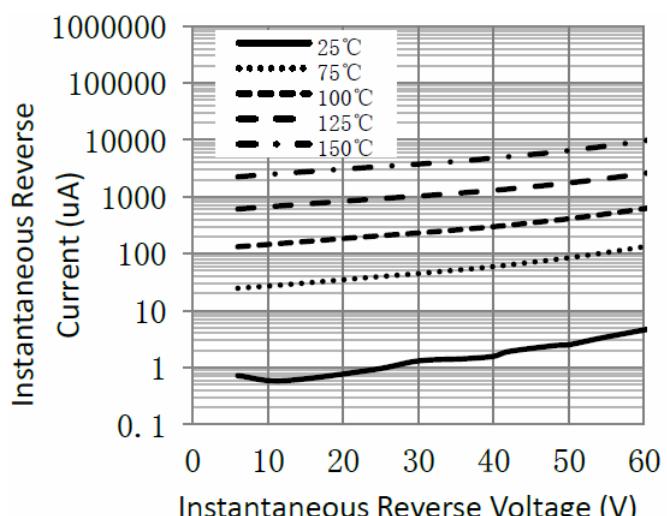


Figure 4. Typical Reverse Characteristics

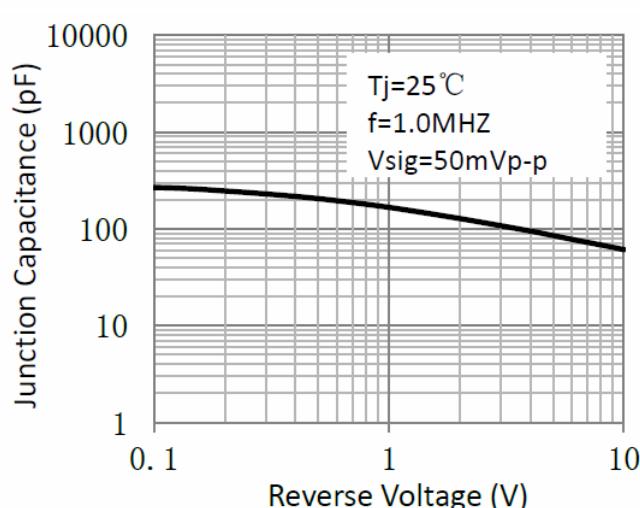


Figure 5. Typical Junction Capacitance