Elektronische Bauelemente

SM360DT-C

Voltage 60V

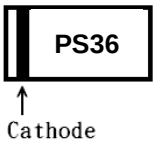
3.0Amp Surface Mount Schottky Barrier Rectifiers

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

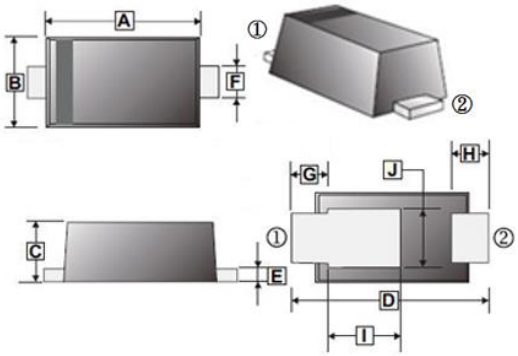
FEATURES

- Heatsink Structure
- Low Profile, Typical Thickness 0.8mm
- Moisture Sensitivity: Level 1, Per J-STD-020
- High Temperature Soldering Guaranteed: 260°C/10s

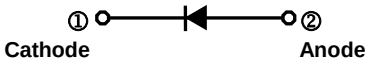
MARKING



SOD-123DT



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.90	3.10	F	0.85	1.05
B	1.90	2.10	G	0.60 REF.	
C	0.75	0.90	H	0.40	0.85
D	3.50	3.90	I	1.66 REF.	
E	0.10	0.25	J	1.30	1.70



PACKAGE INFORMATION

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

ORDER INFORMATION

Part Number	Type
SM360DT-C	Lead (Pb)-free and Halogen-free

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

Parameter		Symbol	Rating		Unit
			Typ.	Max.	
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	60		V
Maximum RMS Voltage		V_{RMS}	42		
Maximum DC Blocking Voltage		V_{DC}	60		
Maximum Average Forward Rectified Current		I_F	3		A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rate Load		I_{FSM}	100		A
Rating for Fusing (t<8.3ms)		I^2t	41.7		A^2S
Instantaneous Forward Voltage @I_F=3A	T_A=25°C	V_F	0.61	0.65	V
	T_A=125°C		0.52	0.6	
Instantaneous Reverse Current @Rated DC Blocking Voltage	T_A=25°C	I_R	4.1	50	uA
	T_A=125°C		3.8	10	mA
Typical Junction Capacitance [3]		C_J	160		pF
Typical Thermal Resistance from Junction-Ambient [1]		$R_{\theta JA}$	60		°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 & 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, 2oz, FR4 PCB.
2. The thermal resistance from junction to case, mounted on P.C.B with recommended copper pads, 2oz, FR4 PCB.
3. Measured at 1MHz and applied reverse voltage of 4V D.C.

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CHARACTERISTIC CURVES

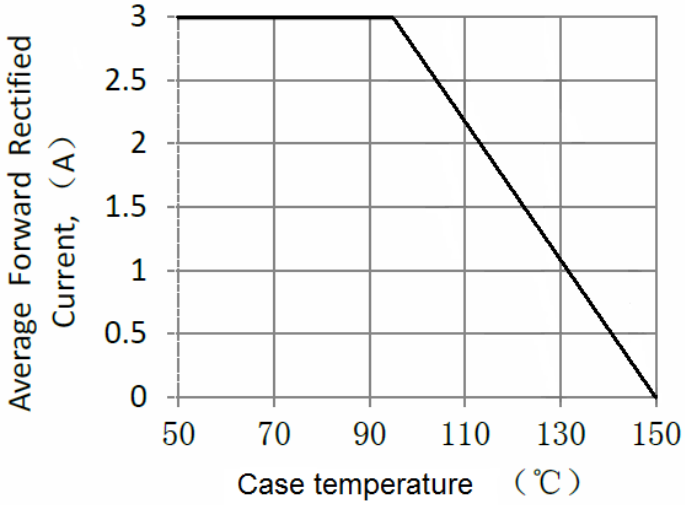


Figure 1.Forward Current Derating Curve

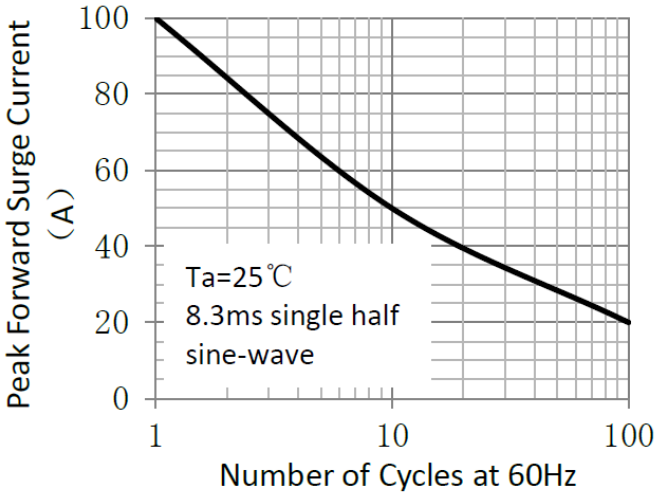


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

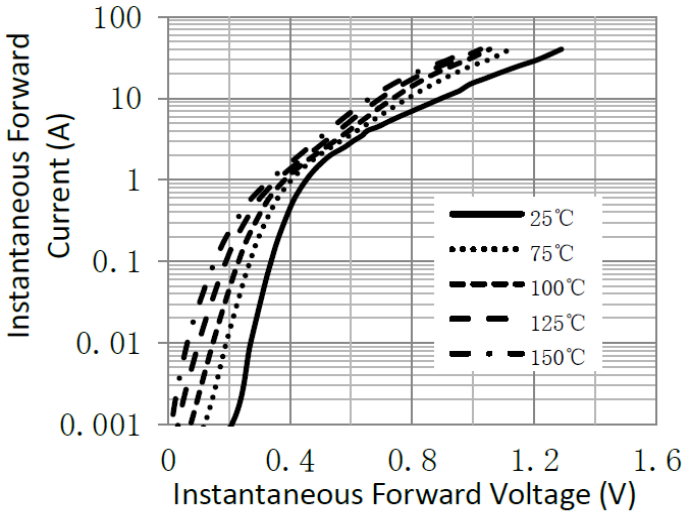


Figure 3. Typical Instantaneous Forward Characteristics

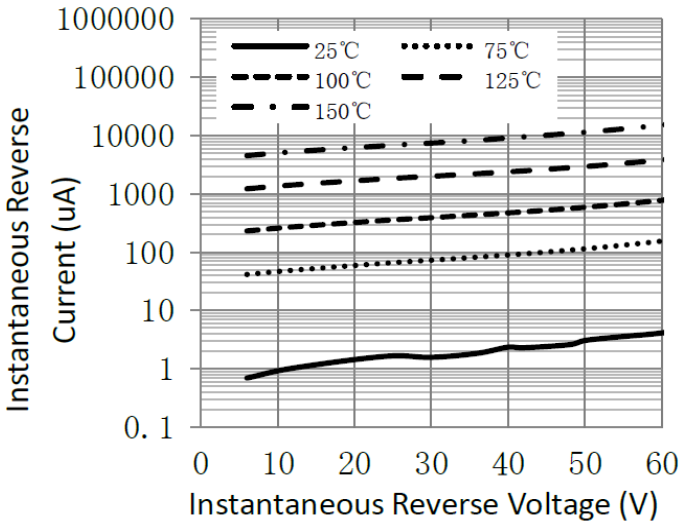


Figure 4. Typical Reverse Characteristics

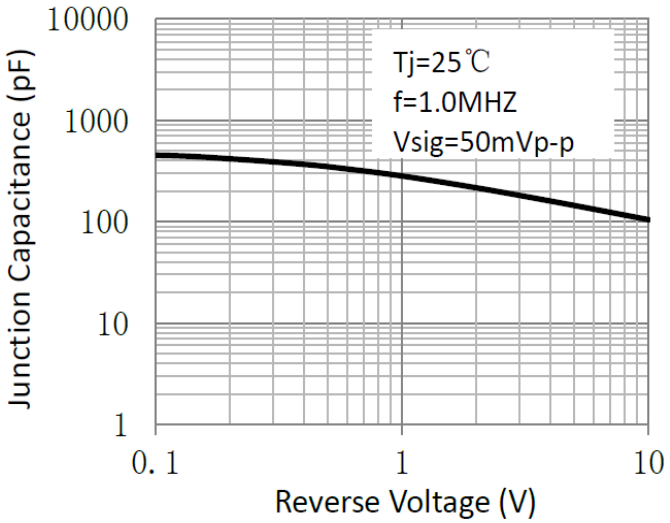
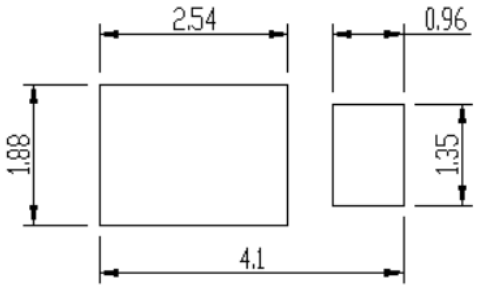


Figure 5. Typical Junction Capacitance



*Dimensions in millimeters

Figure 6. Mounting Pad Layout