Elektronische Bauelemente

SK320DT~SK340DT

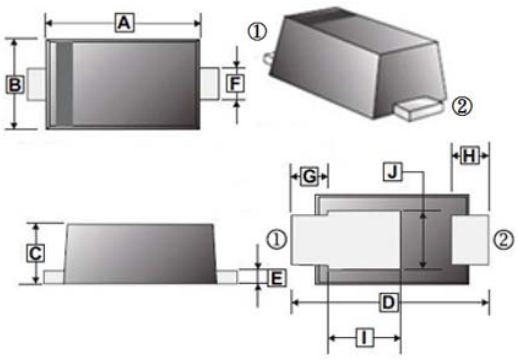
Voltage 20V~40V, 3.0 Amp
Low VF Schottky Barrier Rectifiers

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

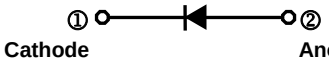
FEATURES

- 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

SOD-123DT

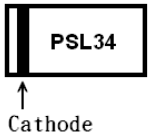


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.9	3.1	F	0.85	1.05
B	1.9	2.1	G	0.6 REF.	
C	0.75	0.9	H	0.4	0.85
D	3.5	3.9	I	1.66 REF.	
E	0.1	0.25	J	1.3	1.7



Cathode Anode

MARKING



PACKAGE INFORMATION

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

ORDER INFORMATION

Part Number	Type
SK320DT~SK340DT	Lead (Pb)-free
SK320DT-C~SK340DT-C	Lead (Pb)-free and Halogen-free

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

Parameter		Symbol	Part Number			Unit
			SK320DT	SK330DT	SK340DT	
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	30	40	V
Maximum RMS Voltage		V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage		V_{DC}	20	30	40	V
Minimum Breakdown Voltage @I_R=1mA		V_{BR}	40	40	40	V
Maximum Average Forward Rectified Current		I_F	3			A
Peak Forward Surge Current@ 8.3 ms single half sine-wave Superimposed on rate load		I_{FSM}	80			A
Rating for Fusing (t<8.3ms)		I^2t	26.7			A^2S
Maximum Instantaneous Forward Voltage	I_F=1A, T_A=25°C	V_F	0.4			V
	I_F=3A, T_A=25°C		0.45			
	I_F=3A, T_A=125°C		0.38			
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25°C	I_R	150			uA
	T_A=125°C		30			mA
Typical Junction Capacitance	4V,1MHz	C_J	210			pF
Typical Thermal Resistance from Junction to Ambient [1]		$R_{\theta JA}$	60			°C / W
Typical Thermal Resistance from Junction to Case [2]		$R_{\theta JC}$	28			
Typical Thermal Resistance from Junction to Lead [1]		$R_{\theta JL}$	6			
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

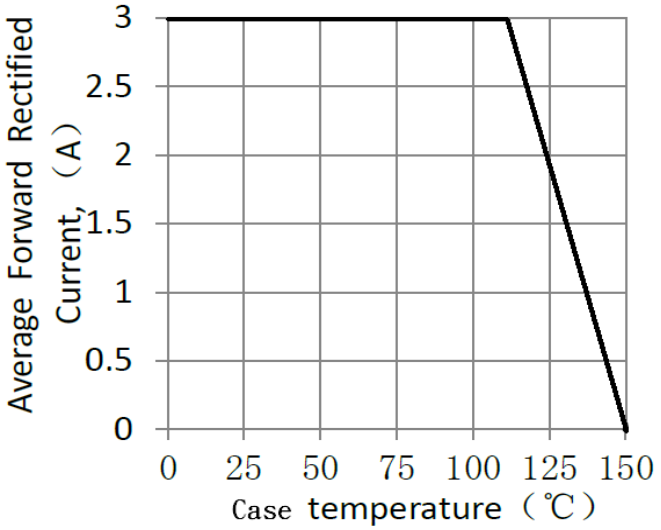


Figure 1.Forward Current Derating Curve

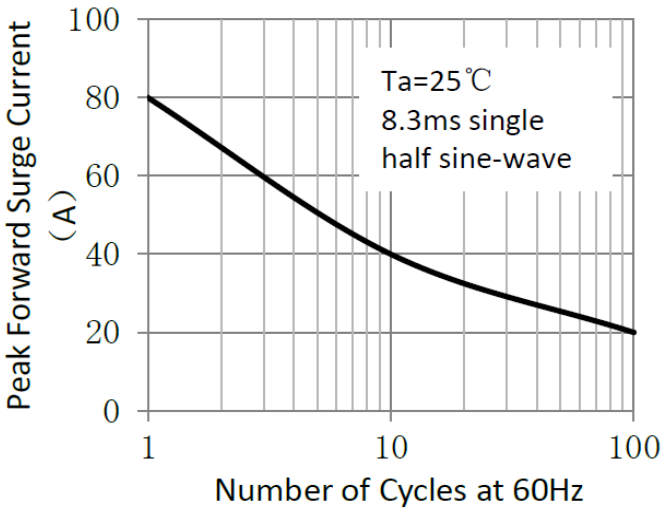


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

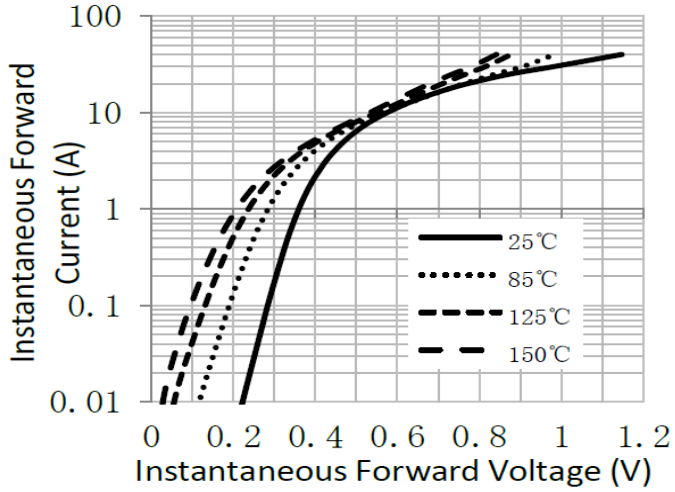


Figure 3. Typical Instantaneous Forward Characteristics

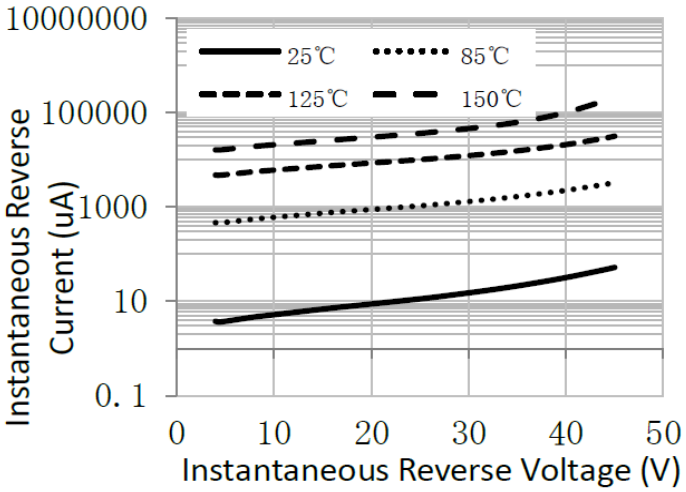


Figure 4. Typical Reverse Characteristics

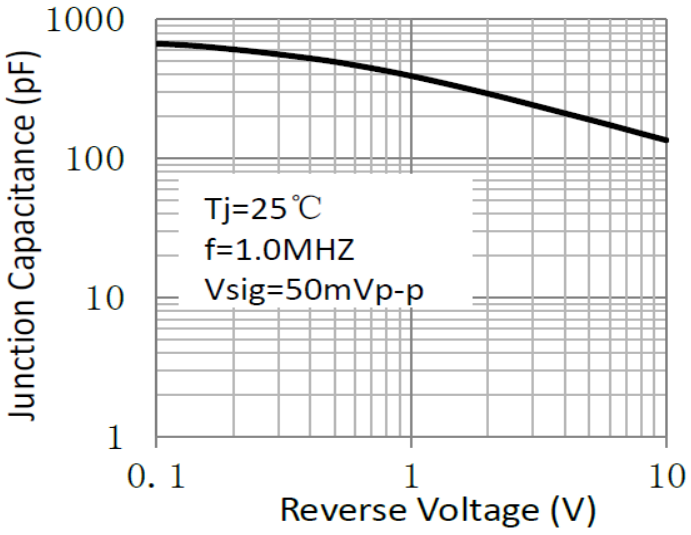


Figure 5. Typical Junction Capacitance