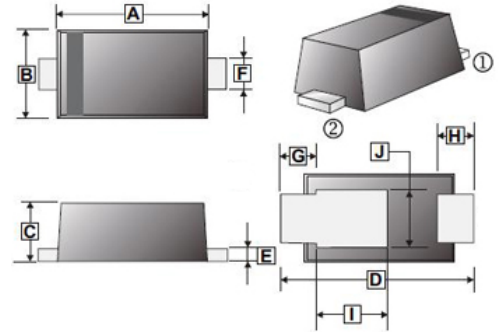


RoHS Compliant Product
 A suffix of "-C" specifies halogen & lead-free

FEATURES

- Glass Passivated Superfast Recovery Rectifiers
- Low Profile, Typical Thickness 0.8mm
- Low Forward Voltage Drop
- Low Leakage Current
- Moisture Sensitivity: level 1, per J-STD-020
- Heatsink Structure
- High Temperature Soldering Guaranteed

SOD-123DT



MARKING

Part Number	Marking Code	Part Number	Marking Code
SUF101DT	PU1	SUF104DT	PU4
SUF102DT	PU2	SUF105DT	PU5
SUF103DT	PU3		

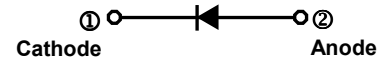
PACKAGE INFORMATION

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

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

ORDER INFORMATION

Part Number	Type
SUF101DT~SUF105DT	Lead (Pb)-free
SUF101DT-C~SUF105DT-C	Lead (Pb)-free and Halogen-free



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

Parameter	Symbol	Part Number					Unit
		SUF101 DT	SUF102 DT	SUF103 DT	SUF104 DT	SUF105 DT	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current	I _{F(AV)}	1					A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	30					A
Maximum Instantaneous Forward Voltage @1A	V _F	0.95		1.3	1.7	V	
Maximum DC Reverse Current @Rated DC Blocking Voltage	I _R	5					µA
		100					
Typical Junction Capacitance @V _R =4V, f=1MHz	C _J	7					pF
Maximum Reverse Recovery Time @I _F =0.5A, I _R =1A, I _{rr} =0.25A	t _{rr}	35					nS
Typical Thermal Resistance from Junction-Ambient ¹	R _{θJA}	63					°C/W
Typical Thermal Resistance from Junction-Case ²	R _{θJC}	39					
Typical Thermal Resistance from Junction-Lead ¹	R _{θJL}	9					
Operating & 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.

RATINGS AND CHARACTERISTIC CURVES

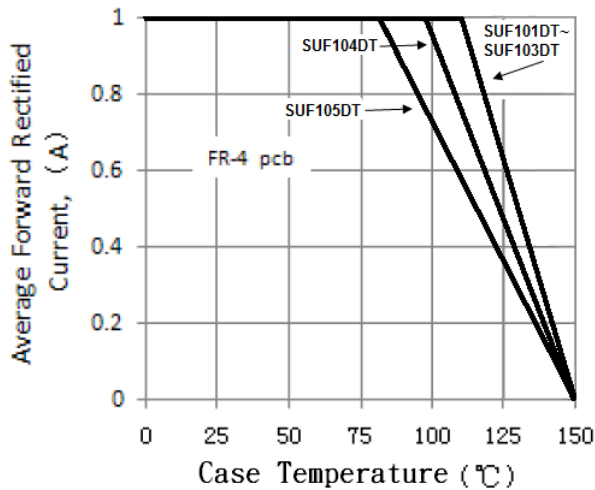


Figure 1. Forward Current Derating Curve

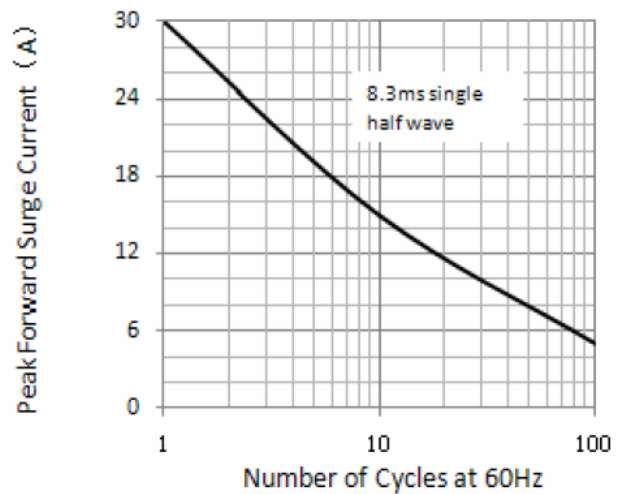


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

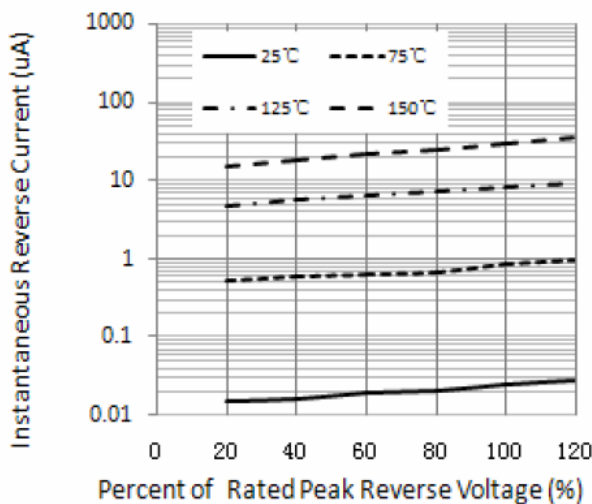


Figure 3. Typical Reverse Characteristics

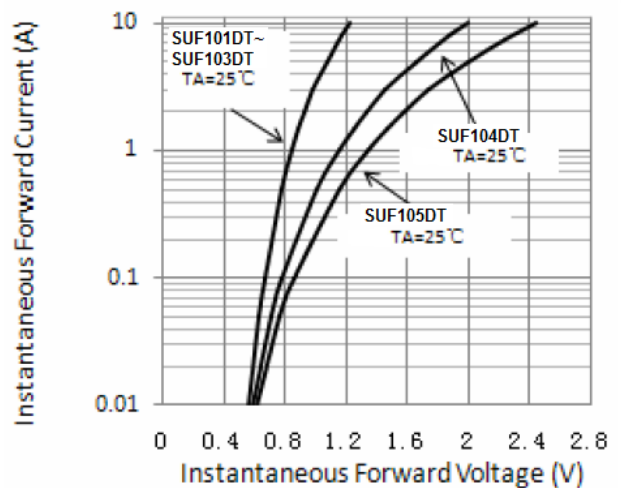


Figure 4. Typical Instantaneous Forward Characteristics

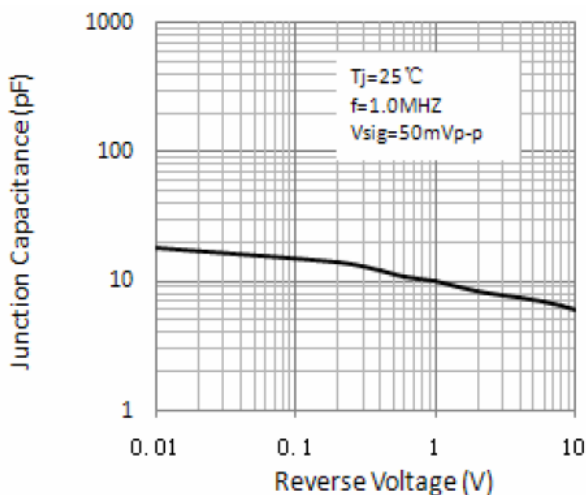


Figure 5. Typical Junction Capacitance

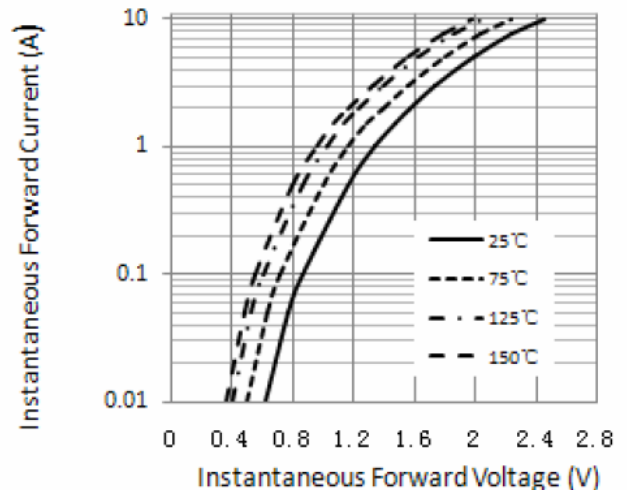


Figure 6. Typical Instantaneous Forward Characteristics (SUF105DT)