Elektronische Bauelemente

1N4148WCR-C

150mA, 75V

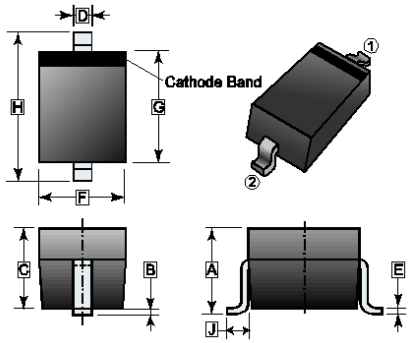
Surface Mount Fast Switching Diode

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

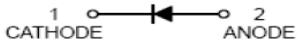
FEATURES

- High Switching Speed
- High Conductance
- Ideally Suited for Automatic Insertion
- MSL 1
- Qualified to AEC-Q101 Standards for High Reliability

SOD-123



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.15 REF.		F	1.45	1.80
B	0.10 REF.		G	2.55	2.85
C	1.00	1.30	H	3.55	3.85
D	0.30	0.78	J	0.50 REF.	
E	0.05	0.25			



MARKING

T4

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123	3K	7 inch

ORDER INFORMATION

Part Number	Type
1N4148WCR-C	Lead (Pb)-free and Halogen-free

ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

Parameter		Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage		V_R	100	V
Peak Repetitive Reverse Voltage		V_{RRM}	75	V
Working Peak Reverse Voltage		V_{RWM}		
DC Blocking Voltage		V_{DC}		
RMS Reverse Voltage		V_{RMS}	53	V
Repetitive Peak Forward Current		I_F	300	mA
Average Rectified Output Current		I_O	150	mA
Non-Repetitive Peak Forward Surge Current	t=1μs	I_{FSM}	2	A
	t=1s		1	
Power Dissipation		P_D	350	mW
Thermal Resistance Junction-Ambient		$R_{\theta JA}$	357	℃/W
Operating Junction & Storage Temperature		T_J, T_{STG}	-65~150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	V_F	-	-	0.715	V	I_F=1mA
		-	-	0.855		I_F=10mA
		-	-	1		I_F=50mA
		-	-	1.25		I_F=150mA
Peak Reverse Leakage Current	I_R	-	-	2.5	μA	V_R=75V
		-	-	50		V_R=75V, T_J=150℃
		-	-	30		V_R=25V, T_J=150℃
		-	-	0.025		V_R=20V
Junction Capacitance	C_J	-	2	-	pF	V_R=0V, f=1MHz
Reverse Recovery Time	T_{RR}	-	4	-	nS	I_F=I_R=10mA, I_{rr}=0.1xI_R, R_L=100Ω

CHARACTERISTIC CURVES

Fig. 1 Forward Characteristics

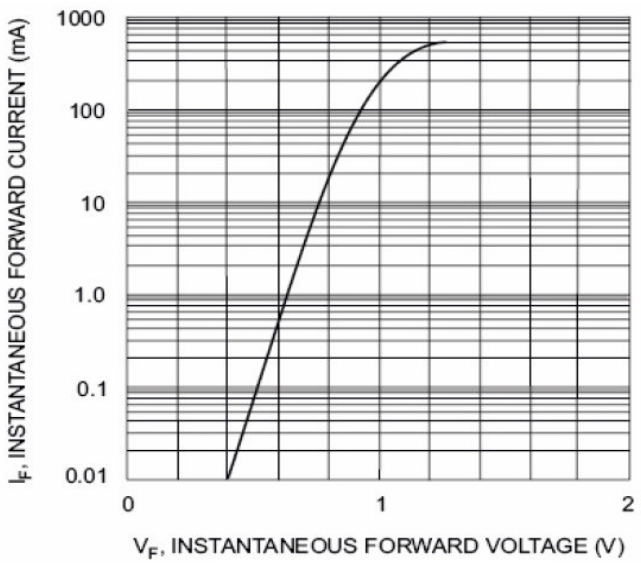


Fig. 2 Leakage Current vs Junction Temperature

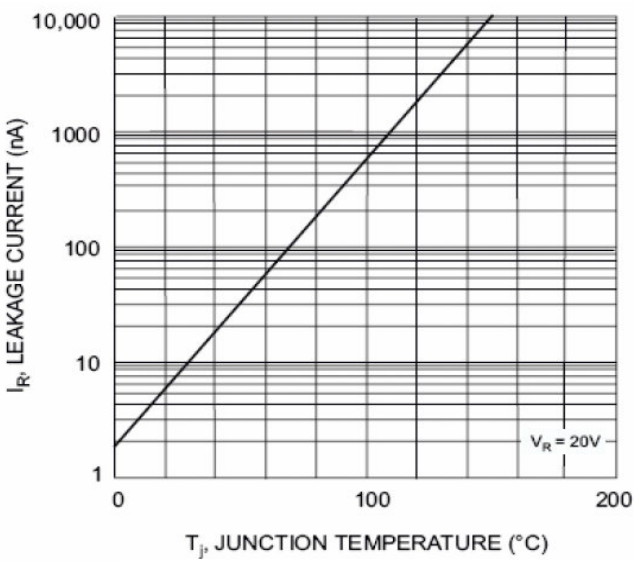


Fig. 3 P_D v.s T_A