

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

SOT-523

FEATURES

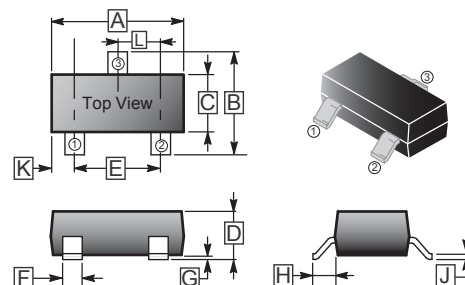
- Fast switching speed
- For general purpose switching applications
- High conductance

MARKING

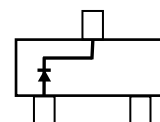
Product	Marking Code
MMBD4148T	KA2

PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-523	3K	7' inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.5	1.7	G	-	0.1
B	1.45	1.75	H	0.55 REF.	
C	0.75	0.85	J	0.1	0.2
D	0.7	0.9	K	-	
E	0.9	1.1	L	0.5 TYP.	
F	0.15	0.25	M	0.25	0.325



ABSOLUTE MAXIMUM RATINGS (@ T_A = 25°C)

PARAMETER	SYMBOL	LIMITS	UNIT
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Peak Forward Surge Current	@1.0μs	2.0	A
	@1.0s	1.0	
Power Dissipation	P _D	200	mW
Thermal Resistance, Junction to Ambient	R _{θJA}	625	K / W
Junction, Storage Temperature	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (@ T_A = 25°C unless otherwise specified)

Parameters	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V _{(BR)R}	75	-	V	I _R = 1μA
Forward Voltage	V _{F1}	-	0.715	V	I _F = 1 mA
	V _{F2}	-	0.855	V	I _F = 10 mA
	V _{F3}	-	1.0	V	I _F = 50 mA
	V _{F4}	-	1.25	V	I _F = 150 mA
Reverse Current	I _{R1}	-	1	μA	V _R = 75V
	I _{R2}	-	25	nA	V _R = 20V
Capacitance between terminals	C _T	-	2	pF	V _R = 0, f = 1 MHz
Reverse Recovery Time	T _{RR}	-	4	ns	I _F = I _R = 10mA I _{RR} = 0.1X I _R , R _L = 100 Ω

RATINGS AND CHARACTERISTIC CURVES

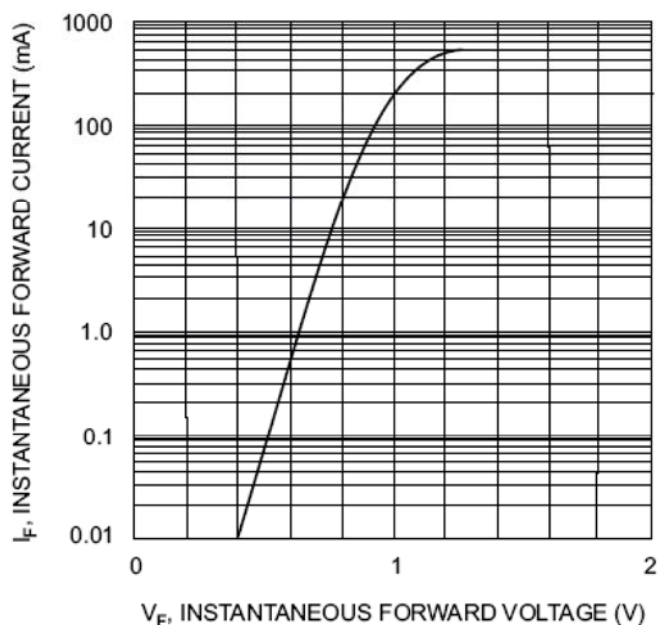


Fig. 1 Forward Characteristics

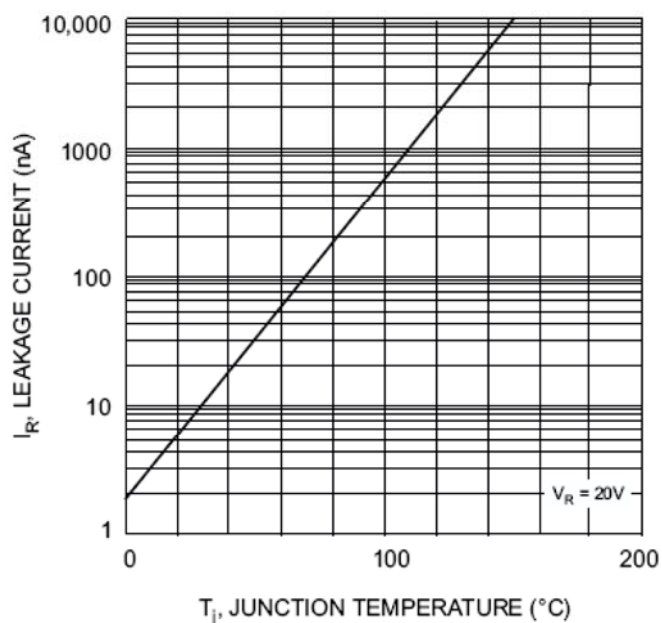


Fig. 2 Leakage Current vs Junction Temperature