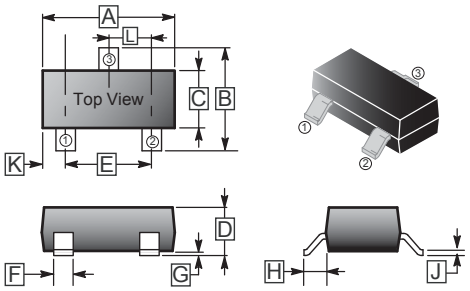
Elektronische Bauelemente

MMBD4148T

Plastic-Encapsulated Diode

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

SOT-523



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

FEATURES

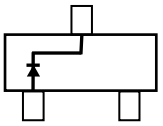
- Fast switching speed
- For general purpose switching applications
- High conductance

MARKING

Product	Marking Code
MMBD4148T	KA2

PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-523	3K	7' inch



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 Working Peak Reverse Voltage DC Blocking Voltage		V_{RRM} V_{RWM} V_R	75	V
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	I_{FSM}	2.0	A
	@1.0s		1.0	
Power Dissipation		P_D	200	mW
Thermal Resistance, Junction to Ambient		$R_{\theta JA}$	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}=0.1XI_R, R_L=100Ω

RATINGS AND CHARACTERISTIC CURVES

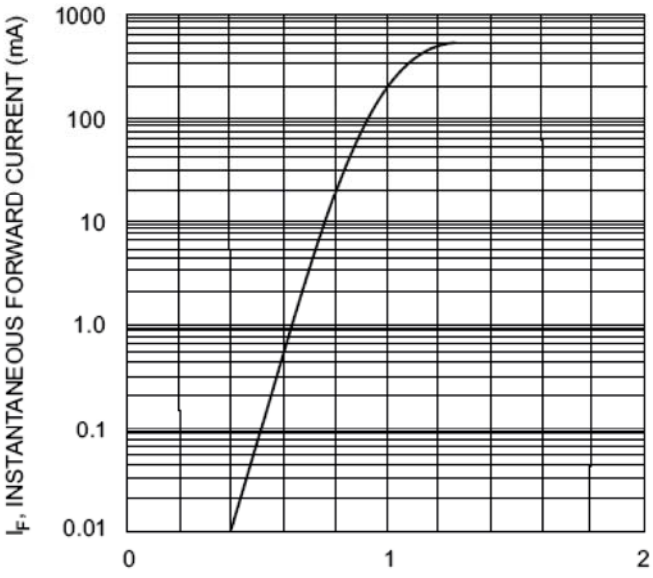


Fig. 1 Forward Characteristics

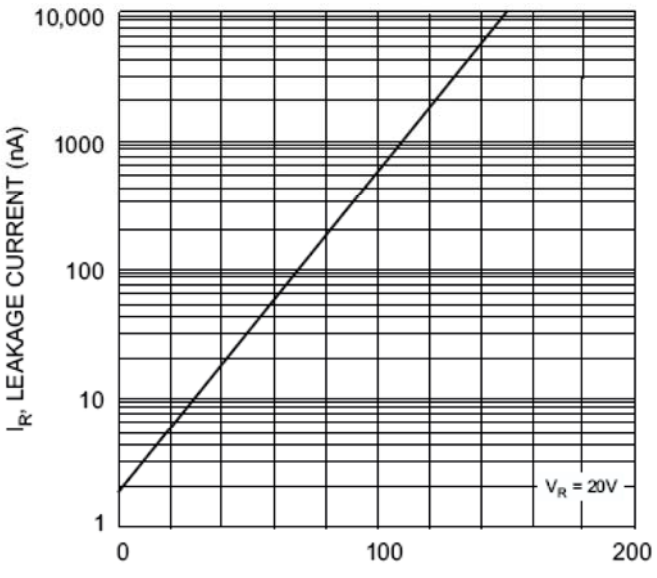


Fig. 2 Leakage Current vs Junction Temperature