



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-523 Plastic-Encapsulate DIODE

MMBD4148T/BAS16T

SWITCHING DIODE

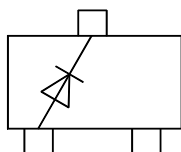
SOT-523



FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

Marking MMBD4148T: KA2, BAS16T:A2



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 @=1.0s	I _{FSM}	2.0 1.0	A
Power Dissipation	P _d	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	K/W
Junction temperature	T _j	150	°C
Storage temperature	T _{STG}	-65~+150	°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V _{(BR)R}	75			V	I _R =1μA
Forward voltage	V _{F1}			0.715	V	I _F =1mA
	V _{F2}			0.855	V	I _F =10mA
	V _{F3}			1.0	V	I _F =50mA
	V _{F4}			1.25	V	I _F =150mA
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 =0V, f=1MHz
Reverse Recovery Time	t _{rr}			4	ns	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω

Typical Characteristics

MMBD4148T /BAS16T

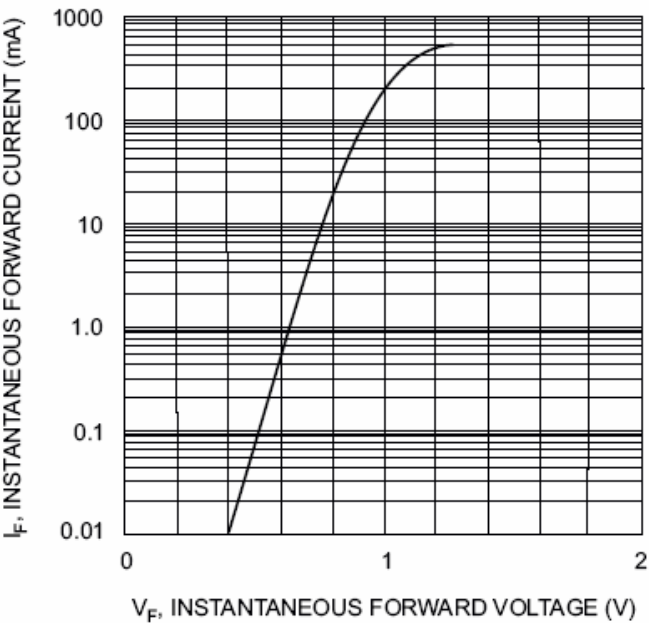


Fig. 1 Forward Characteristics

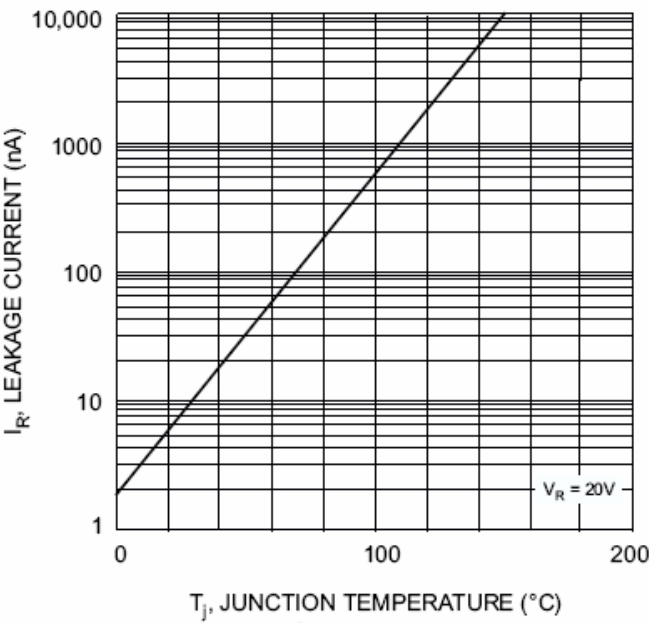


Fig. 2 Leakage Current vs Junction Temperature