



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate DIODE

BAS16

SWITCHING DIODE

SOT-23

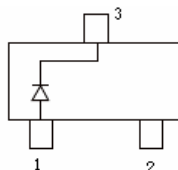


FEATURES

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

Marking: A6

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	225	mW
Thermal Resistance Junction to Ambient	R _{θJA}	556	°C/W
Junction temperature	T _j	150	°C
Storage temperature	T _{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	V _{(BR)R}	I _R = 100μA	75		V
Reverse voltage leakage current	I _R	V _R =75V		1	μA
Forward voltage	V _F	I _F =1mA I _F =10mA I _F =50mA I _F =150mA		0.715 0.855 1 1.25	V
Diode capacitance	C _D	V _R =0, f=1MHz		2	pF
Reveres recovery time	t _{rr}	I _F =I _R =10mA, I _{rr} =0.1×I _R , R _L =100Ω		6	nS

Typical Characteristics

BAS16

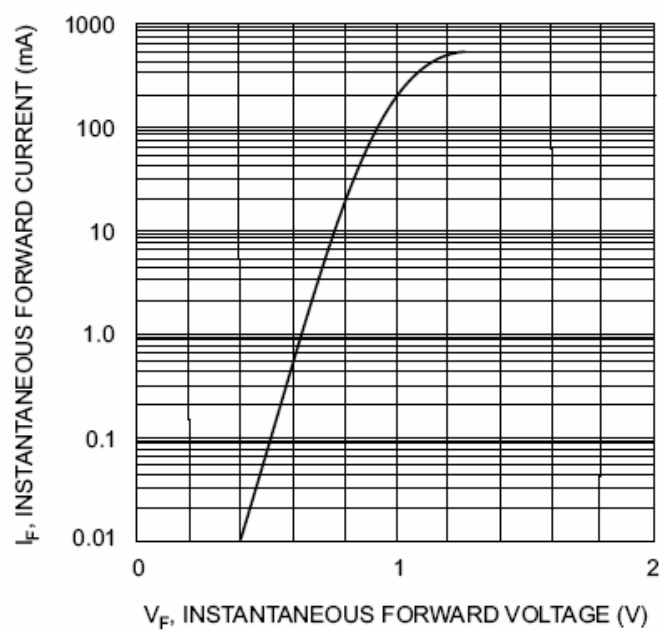


Fig. 1 Forward Characteristics

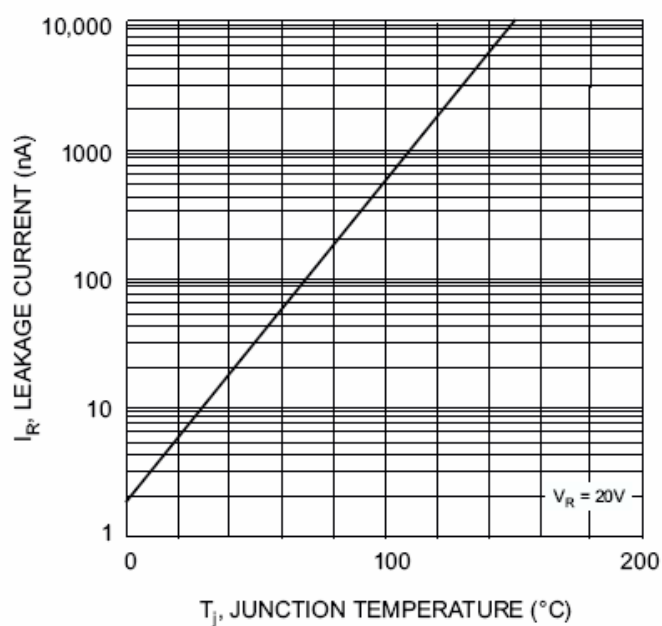


Fig. 2 Leakage Current vs Junction Temperature