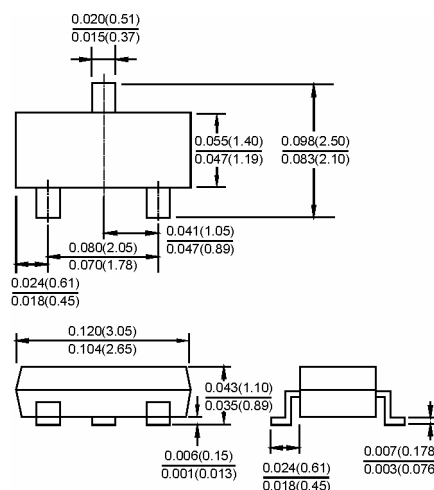




BAS19 / BAS20

Surface Mount Fast Switching Diode

SOT-23

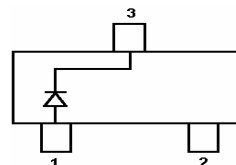


Features

- ✧ Fast switching speed
- ✧ Surface mount package ideally suited for automatic insertion
- ✧ For general purpose switching applications
- ✧ High conductance

Mechanical Data

- ✧ Case: SOT-23, Molded plastic
- ✧ Terminals: Solderable per MIL-STD-202, Method 208
- ✧ Polarity: See diagram
- ✧ BAS19 Marking: JP
- ✧ BAS20 Marking: JR



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	BAS19	BAS20	Units
Working Peak Reverse Voltage DC Blocking Voltage	VRM	100	150	V
Average Rectifier Output Current	Io	200		mA
Power Dissipation	Pd	250		mW
Thermal Resistance Junction to Ambient Air	RθJA	500		°C /W
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 150		°C

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Reverse Breakdown Voltage BAS19 IR=100uA BAS20 IR=100uA	VR(BR)	100 150		v
Peak Reverse Current BAS19 VR=100V BAS20 VR=150V	IR	-	0.1	uA
Forward Voltage IF=100mA IF= 200mA	VF	-	1.0 1.25	V
Junction Capacitance VR=0, f=1.0MHz	Cj	-	5	pF
Reverse Recovery Time IF=IR=30mA, Irr=0.1 x IR,	trr	-	50	nS

RATINGS AND CHARACTERISTIC CURVES (BAS19 / BAS20)

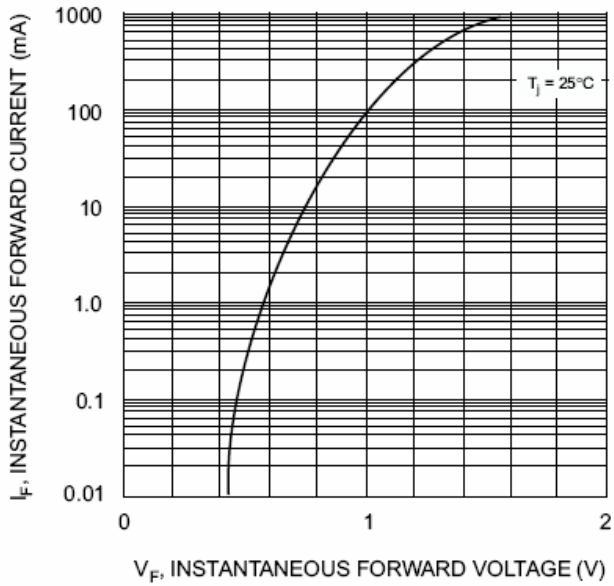


Fig. 1 Forward Characteristics

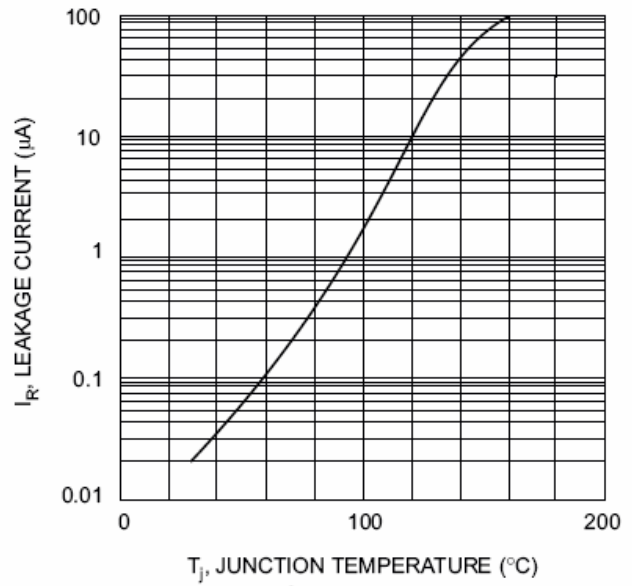


Fig. 2 Leakage Current vs Junction Temperature