



BAS19 / BAS20

Surface Mount Fast Switching Diode

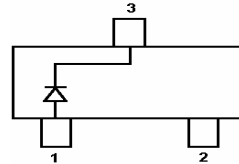
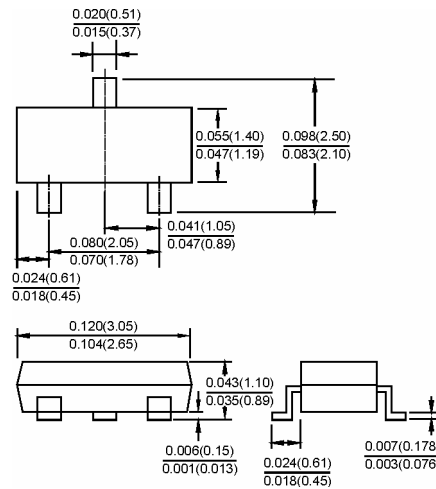
SOT-23

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	R _{θJA}	500		°C /W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to + 150		°C

Electrical Characteristics

Type Number		Symbol	Min	Max	Units
Reverse Breakdown Voltage	BAS19 I _R =100uA BAS20 I _R =100uA	V _{R(BR)}	100 150		V
Peak Reverse Current	BAS19 V _R =100V BAS20 V _R =150V	I _R	-	0.1	uA
Forward Voltage	I _F =100mA I _F = 200mA	V _F	-	1.0 1.25	V
Junction Capacitance VR=0, f=1.0MHz		C _j	-	5	pF
Reverse Recovery Time	I _F =I _R =30mA, I _{rr} =0.1 x I _R ,	t _{rr}	-	50	nS

RATINGS AND CHARACTERISTIC CURVES (BAS19 / BAS20)

