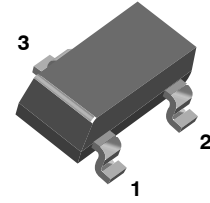
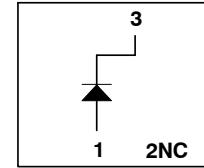


# Small Signal Diode

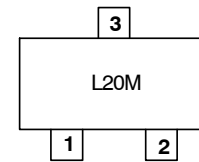
## BAS29



SOT-23 (TO-236)  
CASE 318



### MARKING DIAGRAM



L20 = Specific Device Code  
M = Data Code

### ORDERING INFORMATION

Device	Package	Shipping <sup>†</sup>
BAS29	SOT-23-3 (Pb-Free / Halide Free)	3000 / Tape & Reel

<sup>†</sup>For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, [BRD8011/D](#).

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise noted.)

Symbol	Parameter	Value	Unit
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	120	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	200	mA
I <sub>FSM</sub>	Non-Repetitive Peak Forward Current Pulse Width = 1.0 Second Pulse Width = 1.0 Second	1.0	A
		2.0	A
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C
T <sub>J</sub>	Operating Junction Temperature	150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1. These ratings are based on a maximum junction temperature of 150°C.
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

### THERMAL CHARACTERISTICS

Symbol	Parameter	Value	Unit
P <sub>D</sub>	Power Dissipation	350	mW
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient	357	°C/W

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted.)

Symbol	Parameter	Test Conditions	Min	Max	Unit
V <sub>R</sub>	Breakdown Voltage	I <sub>R</sub> = 1.0 mA	120	-	V
V <sub>F*</sub>	Forward Voltage	I <sub>F</sub> = 10 mA I <sub>F</sub> = 50 mA I <sub>F</sub> = 100 mA I <sub>F</sub> = 200 mA I <sub>F</sub> = 400 mA	-	0.75 0.84 0.90 1.00 1.25	V
I <sub>R*</sub>	Reverse Current	V <sub>R</sub> = 90 V V <sub>R</sub> = 90 V, T <sub>A</sub> = 150°C	-	100 100	nA μA
C <sub>T</sub>	Total Capacitance	V <sub>R</sub> = 0, f = 1.0 MHz	-	2.0	pF
t <sub>rr</sub>	Reverse Recovery Time	I <sub>F</sub> = I <sub>R</sub> = 30 mA, I <sub>RR</sub> = 3.0 mA, R <sub>L</sub> = 100 Ω	-	50	ns

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

\*Pulse test: Pulse width = 300 μs, Duty Cycle = 2%

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