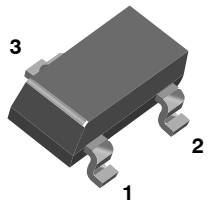
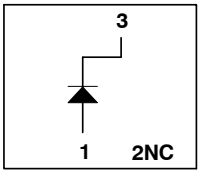
Small Signal Diode

BAS29



SOT−23 (TO−236)
CASE 318



ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise noted.)

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	120	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non−Repetitive Peak Forward Current Pulse Width = 1.0 Second Pulse Width = 1.0 Second	 1.0 2.0	 A A
T_{STG}	Storage Temperature Range	−55 to +150	°C
T_J	Operating Junction Temperature	150	°C

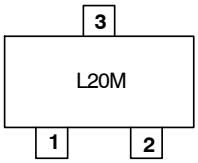
Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

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_D	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	°C/W

MARKING DIAGRAM



L20 = Specific Device Code
M = Data Code

ORDERING INFORMATION

Device	Package	Shipping†
BAS29	SOT−23−3 (Pb−Free / Halide Free)	3000 / Tape & Reel

†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.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted.)

Symbol	Parameter	Test Conditions	Min	Max	Unit
V_R	Breakdown Voltage	I_R = 1.0 mA	120	–	V
V_F*	Forward Voltage	I_F = 10 mA I_F = 50 mA I_F = 100 mA I_F = 200 mA I_F = 400 mA	–	0.75 0.84 0.90 1.00 1.25	V
I_R*	Reverse Current	V_R = 90 V V_R = 90 V, T_A = 150°C	–	100 100	nA μA
C_T	Total Capacitance	V_R = 0, f = 1.0 MHz	–	2.0	pF
t_{rr}	Reverse Recovery Time	I_F = I_R = 30 mA, I_{RR} = 3.0 mA, R_L = 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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