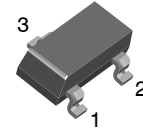


Small Signal Diode

BAS35



SOT-23
CASE 318BM

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

| Symbol | Parameter | Ratings | Unit |
|--------------------|---|-------------------------------|------|
| V _{RRM} | Maximum Repetitive Reverse Voltage | 120 | V |
| I _{F(AV)} | Average Rectified Forward Current | 200 | mA |
| I _{FSM} | Non-Repetitive Peak Forward Surge Current | Pulse Width = 1.0 second | 1.0 |
| | | Pulse Width = 1.0 microsecond | 2.0 |
| T _{STG} | Storage Temperature Range | -55 to +150 | °C |
| T _J | Operating Junction Temperature | 150 | °C |

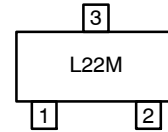
Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

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

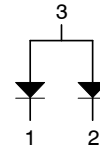
| Symbol | Parameter | Ratings | Unit |
|------------------|---|---------|------|
| P _D | Power Dissipation | 350 | °C/W |
| R _{θJA} | Thermal Resistance, Junction-to-Ambient | 357 | |

MARKING DIAGRAM



L22 = Specific Device Code
M = Date Code

CONNECTION DIAGRAM



ORDERING INFORMATION

| Device | Package | Shipping† |
|--------|----------------------------------|--------------------|
| BAS35 | SOT-23 3L (Pb-Free, Halide Free) | 3000 / Tape & Reel |

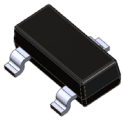
†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, [BRD8011/D](#).

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

| Symbol | Parameter | Conditions | Min | Max | Unit |
|-----------------|-----------------------|---|-----|------|------|
| V _R | Breakdown Voltage | I _R = 1.0 mA | 120 | - | V |
| V _F | Forward Voltage | I _F = 10 mA | - | 750 | mV |
| | | I _F = 50 mA | - | 840 | mV |
| | | I _F = 100 mA | - | 900 | mV |
| | | I _F = 200 mA | - | 1.0 | V |
| | | I _F = 400 mA | - | 1.25 | V |
| I _R | Reverse Current | V _R = 90 V | - | 100 | nA |
| | | V _R = 90 V, T _A = 150°C | - | 100 | μA |
| C _T | Total Capacitance | V _R = 0, f = 1.0 MHz | - | 35 | pF |
| t _{rr} | Reverse Recovery Time | I _F = I _R = 10 mA, I _{RR} = 1.0 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.

MECHANICAL CASE OUTLINE PACKAGE DIMENSIONS

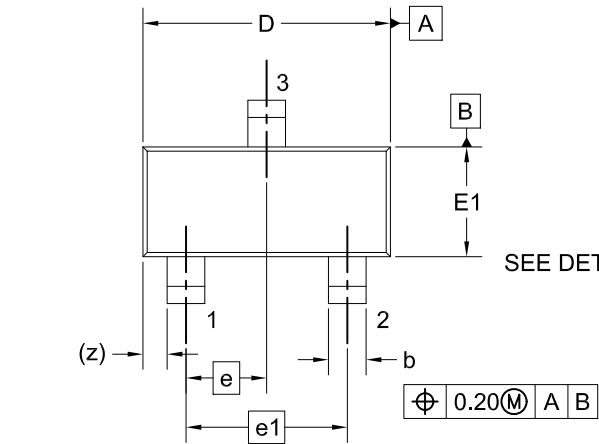


SOT-23
CASE 318BM
ISSUE A

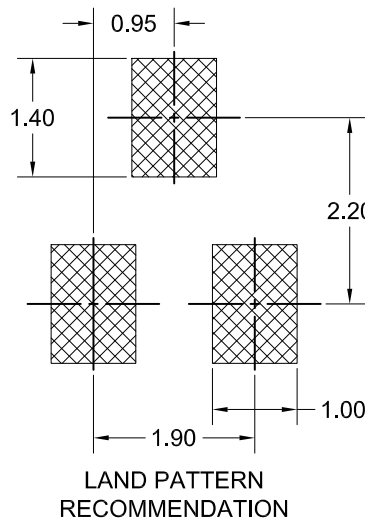
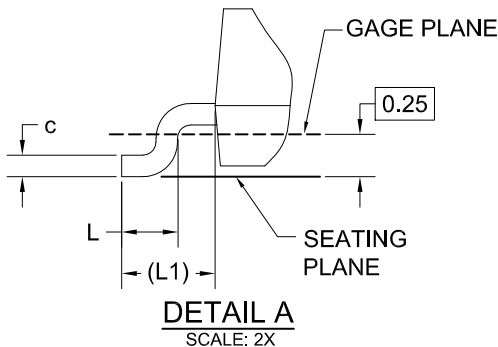
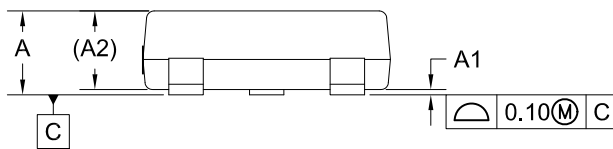
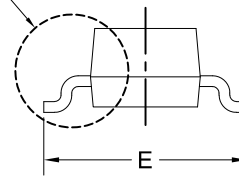
DATE 01 SEP 2021

NOTES: UNLESS OTHERWISE SPECIFIED

- A) REFERENCE JEDEC REGISTRATION TO-236, VARIATION AB, ISSUE H.
- B) ALL DIMENSIONS ARE IN MILLIMETERS.
- C) DIMENSIONS ARE INCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR EXTRUSIONS.
- D) DIMENSIONING AND TOLERANCING PER ASME Y14.5M - 2009.

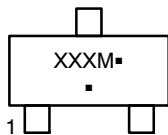


SEE DETAIL A



| DIM | MILLIMETERS | | |
|-----|-------------|------|------|
| | MIN. | NOM. | MAX. |
| A | --- | --- | 1.20 |
| A1 | 0.00 | 0.05 | 0.10 |
| A2 | 0.93 REF | | |
| b | 0.37 | 0.44 | 0.60 |
| c | 0.08 | 0.15 | 0.23 |
| D | 2.72 | 2.92 | 3.12 |
| E | 2.10 | 2.40 | 2.70 |
| E1 | 1.15 | 1.30 | 1.50 |
| e | 0.95 BSC | | |
| e1 | 1.90 BSC | | |
| L | 0.20 | --- | --- |
| L1 | 0.55 REF | | |
| z | 0.29 REF | | |

GENERIC MARKING DIAGRAM*



- XXX = Specific Device Code
- M = Date Code
- = Pb-Free Package

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "▪", may or may not be present. Some products may not follow the Generic Marking.

*FOR ADDITIONAL INFORMATION ON OUR PB-FREE STRATEGY AND SOLDERING DETAILS, PLEASE DOWNLOAD THE ON SEMICONDUCTOR SOLDERING AND MOUNTING TECHNIQUES REFERENCE MANUAL, SOLDERRM/D.

| | | |
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| DESCRIPTION: | SOT-23 | PAGE 1 OF 1 |

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