



MOTOROLA

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Product Preview

The RF Building Block Series

NPN Silicon

Low Noise Transistor

The MBC13901 is a high performance transistor fabricated using Motorola's 15 GHz f_T bipolar IC process. It is housed in the 4-lead SC-70 (SOT-343) surface mount plastic package resulting in a parasitic effect reduction and RF performance enhancements. The high performance at low power makes the MBC13901 suitable for front-end applications in portable wireless systems such as pagers, cellular and cordless phones.

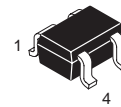
- Low Noise Figure, $NF_{min} = 1.0$ dB (Typ) @ 1.0 GHz, 3.0 V and 3.0 mA
- Maximum Stable Gain, 22 dB @ 1.0 GHz, 3.0 V and 3.0 mA
- Output Third Order Intercept, $OIP_3 = 23$ dBm @ 1.0 GHz, 3.0 V and 22 mA
- Ultra small SOT-343 Surface Mount Package
- Available Only in Tape and Reel Packaging

MBC13901

**RF NPN
SILICON TRANSISTOR**

$f_T = 15$ GHz
 $NF_{min} = 1.2$ dB
 $I_{C_{MAX}} = 20$ mA
 $V_{CEO} = 5.0$ V

**SEMICONDUCTOR
TECHNICAL DATA**



(Scale 4:1)

PLASTIC PACKAGE
 CASE 318M
 (SOT-343, Tape & Reel Only)

ORDERING INFORMATION

Device	Package
MBC13901	SOT-343

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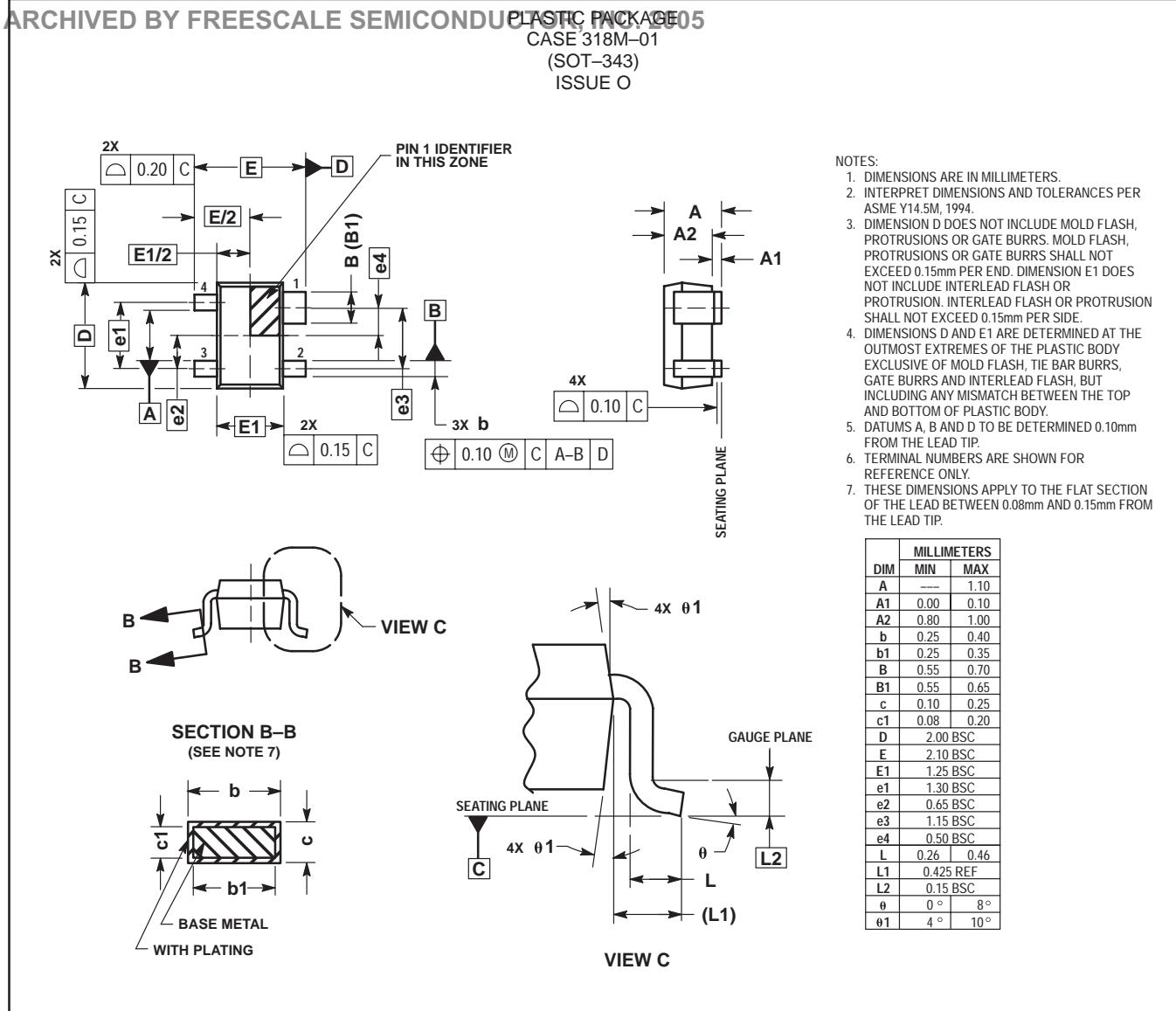
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OUTLINE DIMENSIONS



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