

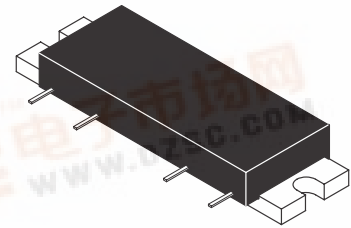
# The RF Line PCS Band RF Linear LDMOS Amplifier

Designed for ultra-linear amplifier applications in 50 ohm systems operating in the PCS frequency band. A silicon FET Class A design provides outstanding linearity and gain. In addition, the excellent group delay and phase linearity characteristics are ideal for digital modulation systems, such as TDMA and CDMA.

- Third Order Intercept: 46 dBm Typ
- Power Gain: 30 dB Typ (@ f = 1960 MHz)
- Excellent Phase Linearity and Group Delay Characteristics
- Ideal for Feedforward Base Station Applications

**MHL19338**

**1900–2000 MHz  
 4.0 W, 30 dB  
 RF LINEAR LDMOS AMPLIFIER**



CASE 301AP-02, STYLE 1

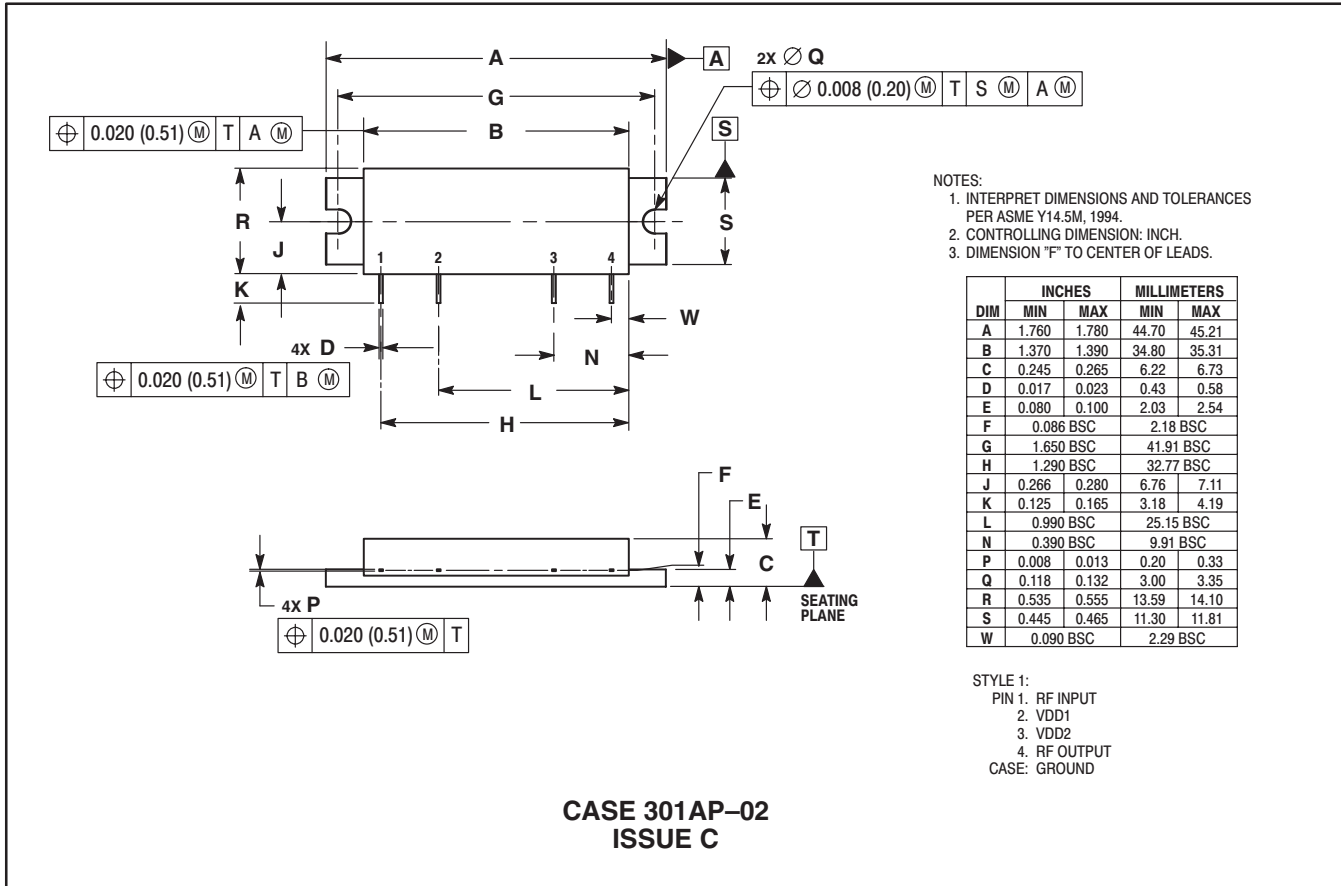
### ABSOLUTE MAXIMUM RATINGS (T<sub>C</sub> = 25°C unless otherwise noted)


Rating	Symbol	Value	Unit
DC Supply Voltage	V <sub>DD</sub>	30	Vdc
RF Input Power	P <sub>in</sub>	+10	dBm
Storage Temperature Range	T <sub>stg</sub>	-40 to +100	°C
Operating Case Temperature Range	T <sub>C</sub>	-20 to +100	°C

### ELECTRICAL CHARACTERISTICS (V<sub>DD</sub> = 28 Vdc, T<sub>C</sub> = 25°C; 50 Ω System)

Characteristic	Symbol	Min	Typ	Max	Unit
Supply Current	I <sub>DD</sub>	—	500	525	mA
Power Gain (f = 1960 MHz)	G <sub>p</sub>	29	30	31	dB
Gain Flatness (f = 1900–2000 MHz)	G <sub>F</sub>	—	0.1	0.4	dB
Power Output @ 1 dB Comp. (f = 1950 MHz)	P <sub>out</sub> 1 dB	35	36	—	dBm
Input VSWR (f = 1900–2000 MHz)	VSWR <sub>in</sub>	—	1.2:1	1.5:1	
Third Order Intercept (f <sub>1</sub> = 1950 MHz, f <sub>2</sub> = 1955 MHz)	ITO	45	46	—	dBm
Noise Figure (f = 2000 MHz)	NF	—	4.2	4.5	dB

## PACKAGE DIMENSIONS



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