

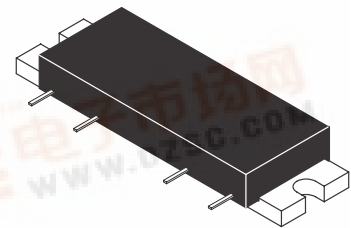
The RF Line PCS Band RF Linear LDMOS Amplifier

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 = 1850 MHz)
- Excellent Phase Linearity and Group Delay Characteristics
- Ideal for Feedforward Base Station Applications

MHL18336

**1800–1900 MHz
 4 W, 30 dB
 RF LINEAR LDMOS AMPLIFIER**



CASE 301AP-02, STYLE 1

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

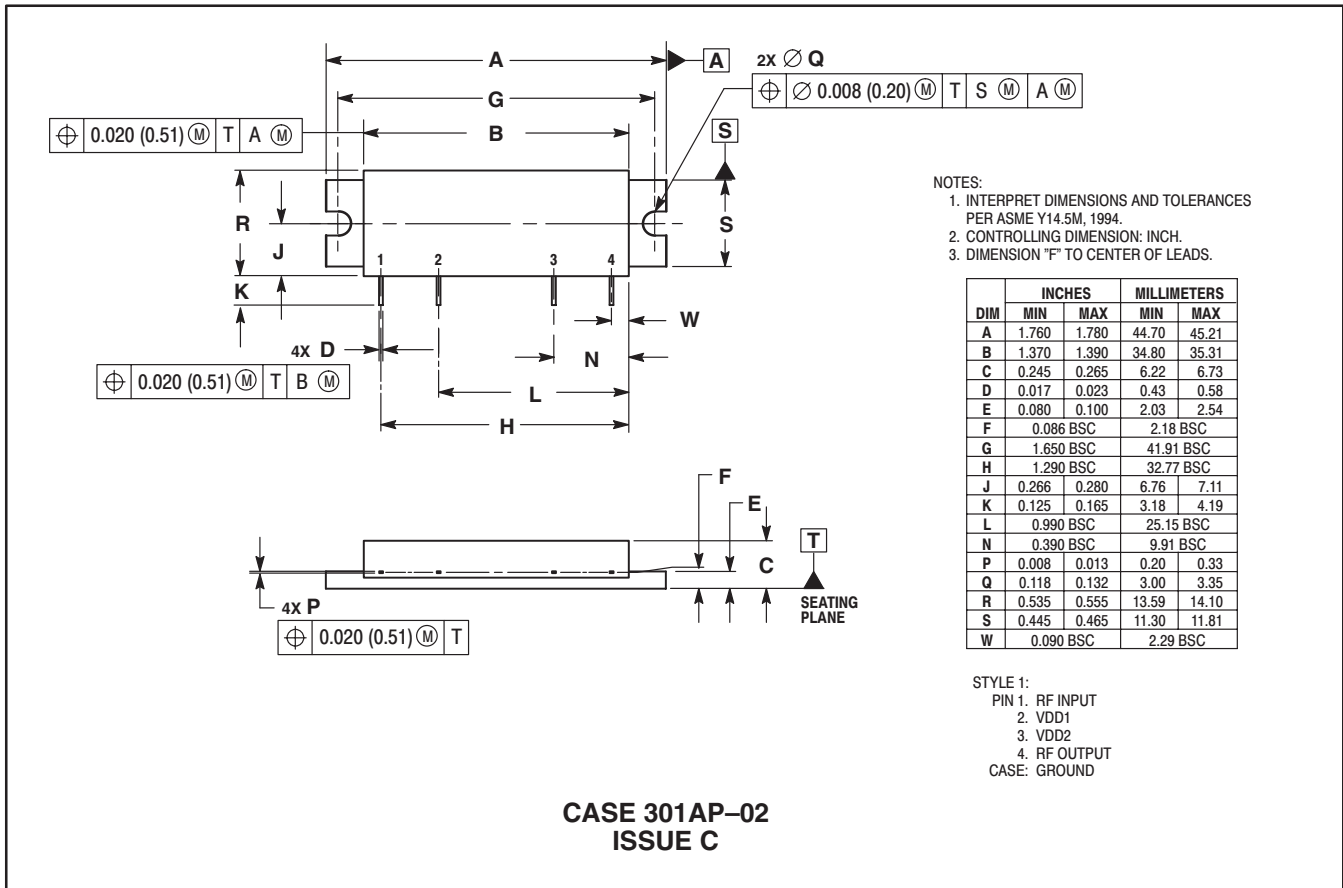
Rating	Symbol	Value	Unit
DC Supply Voltage	V _{DD}	30	Vdc
RF Input Power	P _{in}	+10	dBm
Storage Temperature Range	T _{stg}	-40 to +100	°C
Operating Case Temperature Range	T _C	-20 to +100	°C


ELECTRICAL CHARACTERISTICS (V_{DD} = 26 Vdc, T_C = 25°C; 50 Ω System)

Characteristic	Symbol	Min	Typ	Max	Unit
Supply Current	I _{DD}	—	500	525	mA
Power Gain (f = 1850 MHz)	G _p	29	30	31	dB
Gain Flatness (f = 1800–1900 MHz)	G _F	—	0.2	0.4	dB
Power Output @ 1 dB Comp. (f = 1850 MHz)	P _{out 1 dB}	35	36	—	dBm
Input VSWR (f = 1800–1900 MHz)	VSWR _{in}	—	1.2:1	1.5:1	
Third Order Intercept (f ₁ = 1847 MHz, f ₂ = 1852 MHz)	ITO	45	46	—	dBm
Noise Figure (f = 1850 MHz)	NF	—	4.2	4.5	dB

Freescale Semiconductor, Inc.

PACKAGE DIMENSIONS



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