

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, EDGE and CDMA.

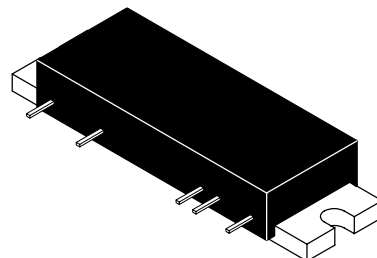
- Third Order Intercept Point: 50 dBm Typ
- Power Gain: 29.4 dB Typ (@ f = 1960 MHz)
- Input VSWR \leq 1.5:1

Features

- Excellent Phase Linearity and Group Delay Characteristics
- Ideal for Feedforward Base Station Application
- Replaced MHL19926. There are no form, fit or function changes with this part replacement.
- N Suffix Indicates Lead-Free Terminations

MHL19926N

**1930-1990 MHz, 10 W, 29.4 dB
RF LINEAR LDMOS AMPLIFIER**



CASE 301AY-01, STYLE 1

ARCHIVE INFORMATION

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Table 1. Absolute Maximum Ratings ($T_C = 25^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Unit
DC Supply Voltage	V_{DD}	30	Vdc
RF Input Power	P_{in}	+17	dBm
Storage Temperature Range	T_{stg}	- 40 to +100	$^\circ\text{C}$
Operating Case Temperature Range	T_C	- 20 to +100	$^\circ\text{C}$

Table 2. Electrical Characteristics ($T_C = +25^\circ\text{C}$; $V_{DD} = 26$ Vdc; 50 Ω System)

Characteristic	Symbol	Min	Typ	Max	Unit
Supply Current	I_{DD}	—	1	1.05	A
Power Gain (f = 1960 MHz)	G_p	27.9	29.4	30.9	dB
Gain Flatness (f = 1930-1990 MHz)	G_F	—	0.3	0.5	dB
Power Output @ 1 dB Compression (f = 1960 MHz)	P_{1dB}	39	40	—	dBm
Third Order Intercept (f1 =1957 MHz, f2=1962 MHz)	ITO	49.5	50	—	dBm
Noise Figure (f = 1990 MHz)	NF	—	4.2	5	dB

NOTE - CAUTION - MOS devices are susceptible to damage from electrostatic charge. Reasonable precautions in handling and packaging MOS devices should be observed.

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