

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, GSM EDGE and CDMA.

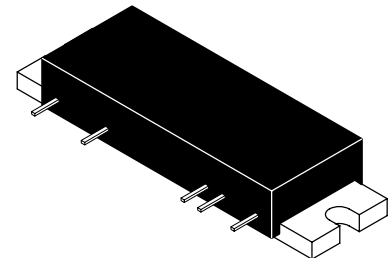
- Third Order Intercept Point: 50 dBm Typ
- Power Gain: 28.6 dB Typ (@ f = 1842 MHz)
- Input VSWR \leq 1.5:1

Features

- Excellent Phase Linearity and Group Delay Characteristics
- Ideal for Feedforward Base Station Application
- Replaced MHL18926. There are no form, fit or function changes with this part replacement.
- N Suffix Indicates Lead-Free Terminations

MHL18926N

**1805-1880 MHz, 10 W, 28.6 dB
 RF LINEAR LDMOS AMPLIFIER**



CASE 301AY-01, STYLE 1

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

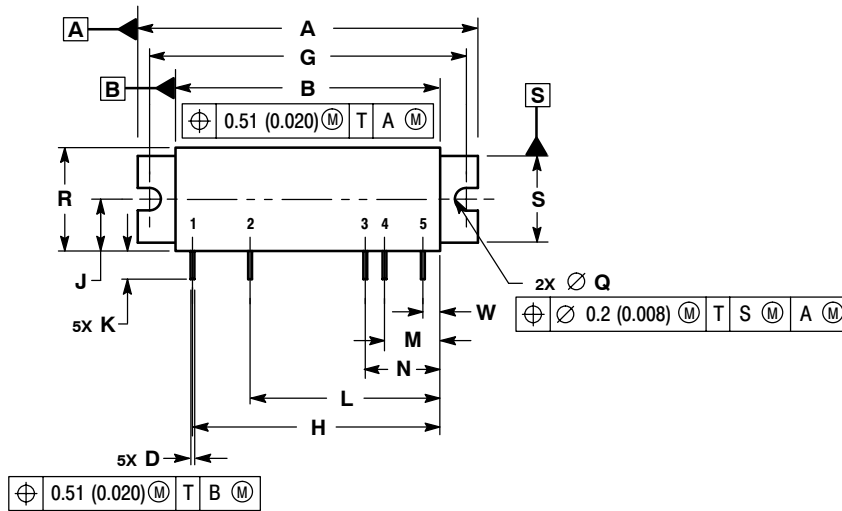
Rating	Symbol	Value	Unit
DC Supply Voltage	V_{DD}	30	Vdc
RF Input Power	P_{in}	+18	dBm
Storage Temperature Range	T_{stg}	- 40 to +100	$^\circ\text{C}$
Operating Case Temperature Range	T_C	- 20 to +100	$^\circ\text{C}$

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

Characteristic	Symbol	Min	Typ	Max	Unit
Supply Current	I_{DD}	—	1.1	1.15	A
Power Gain (f = 1842 MHz)	G_p	27.1	28.6	30.1	dB
Gain Flatness (f = 1805-1880 MHz)	G_F	—	0.3	0.5	dB
Power Output @ 1 dB Compression (f = 1842 MHz)	P1dB	39	40	—	dBm
Third Order Intercept (f1 =1839 MHz, f2=1844 MHz)	ITO	49.5	50	—	dBm
Noise Figure (f = 1880 MHz)	NF	—	4.2	5	dB

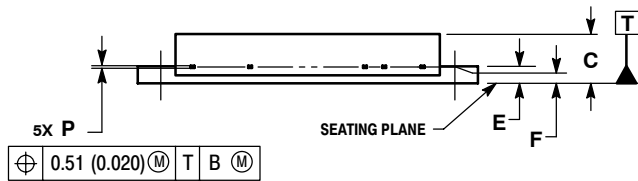
NOTE - CAUTION - MOS devices are susceptible to damage from electrostatic charge. Reasonable precautions in handling and packaging MOS devices should be observed.

PACKAGE DIMENSIONS



- NOTES:
 1. CONTROLLING DIMENSION: MILLIMETER.
 2. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M, 1982.
 3. DIMENSION F TO CENTER LINE OF LEADS.

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	44.7	45.21	1.760	1.780
B	34.8	35.31	1.370	1.390
C	6.22	6.73	0.245	0.265
D	0.43	0.58	0.017	0.023
E	2.03	2.54	0.080	0.100
F	2.18 BSC		0.086 BSC	
G	41.91 BSC		1.650 BSC	
H	32.77 BSC		1.290 BSC	
J	6.76	7.11	0.266	0.280
K	3.18	4.19	0.125	0.165
L	25.15 BSC		0.990 BSC	
M	7.37 BSC		0.290 BSC	
N	9.91 BSC		0.390 BSC	
P	0.2	0.33	0.008	0.013
Q	3	3.35	0.118	0.132
R	13.59	14.1	0.535	0.555
S	11.3	11.81	0.445	0.465
W	2.29 BSC		0.090 BSC	



- STYLE 1:
 PIN 1. RF INPUT
 2. VDD1
 3. VDD2
 4. VDD3
 5. RF OUTPUT
 CASE: GROUND

CASE 301AY-01
 ISSUE A

How to Reach Us:

Home Page:
www.freescale.com

E-mail:
support@freescale.com

USA/Europe or Locations Not Listed:
Freescale Semiconductor
Technical Information Center, CH370
1300 N. Alma School Road
Chandler, Arizona 85224
+1-800-521-6274 or +1-480-768-2130
support@freescale.com

Europe, Middle East, and Africa:
Freescale Halbleiter Deutschland GmbH
Technical Information Center
Schatzbogen 7
81829 Muenchen, Germany
+44 1296 380 456 (English)
+46 8 52200080 (English)
+49 89 92103 559 (German)
+33 1 69 35 48 48 (French)
support@freescale.com

Japan:
Freescale Semiconductor Japan Ltd.
Headquarters
ARCO Tower 15F
1-8-1, Shimo-Meguro, Meguro-ku,
Tokyo 153-0064
Japan
0120 191014 or +81 3 5437 9125
support.japan@freescale.com

Asia/Pacific:
Freescale Semiconductor Hong Kong Ltd.
Technical Information Center
2 Dai King Street
Tai Po Industrial Estate
Tai Po, N.T., Hong Kong
+800 2666 8080
support.asia@freescale.com

For Literature Requests Only:
Freescale Semiconductor Literature Distribution Center
P.O. Box 5405
Denver, Colorado 80217
1-800-441-2447 or 303-675-2140
Fax: 303-675-2150
LDCForFreescaleSemiconductor@hibbertgroup.com

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