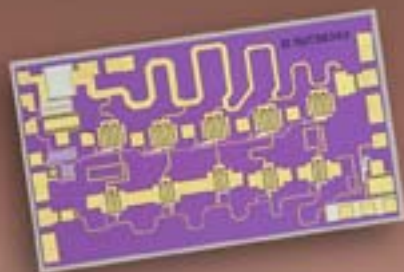


## 2008-2009 Product Selection Guide

Low Noise Wideband  
(6-18GHz) Amplifier Module

Distributed Amplifier



# 802.16

# Space

Low Phase Noise

Industrial



# PHEMT

# WiMax

Ultra High Linearity



Standard & Custom

# Military

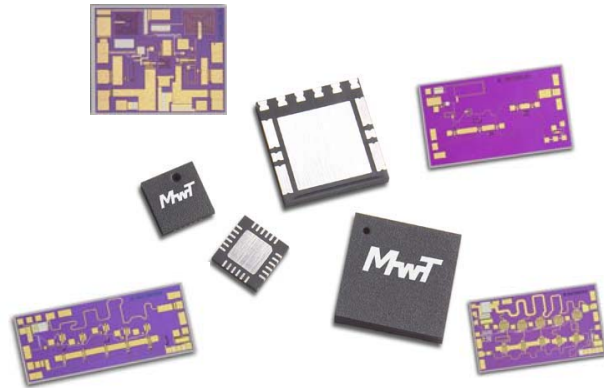
# MMIC's



# New MMIC Products



- High Performance/Quality MMIC Based on InGaP HBT, pHEMT, and Linear MESFET Technologies
- High Linearity, Fully Matched WiMax Power Amplifiers
- High Power/Efficiency, Wide and Narrow Band Power Amplifiers
- High Linearity, Broadband Gain Blocks



## WiMAX / WLAN Linear Power Amplifiers

Model	Pkg /Chip	Freq	Linear Gain	Gain Flatness	Input RL	Output RL	Pout @ -1 dB	Pout @ 2.0% EVM	OIP3	Vgs	Vdd	DC Current
> New		(GHz)	Typ/Min (dB)	Typ/Max ± (dB)	Typ (dB)	Typ (dB)	Typ/Min (dBm)	Typ (dBm)	Typ (dBm)	(V)	(V)	Typ/Max (mA)
> MHA-242733-Q5	Q5	2.4-2.7	14.0 / 12.0	1.0 / 1.5	8.0	8.0	33.0 / -	25.0	46.0	NA	7.5	640 / 800
> MHA-333833-Q5	Q5	3.3-3.8	25.0 / 22.0	2.0 / -	10	10	33.0 / -	25.0	44.0	NA	7.5	800/1000
> MMA-343737-Q10	Q10	3.4-3.7	13.0 / 12.0	-	9.5	5.0	36.5 / -	29.5	48.0	NA	8.5	1000 / -
> MHA-495433	Chip	4.9-5.4	10.0 / -	0.5 / -	10	15	33.5 / -	25.6	45.0	NA	9.0	600/-
> MMA-495930-Q4	Q4	4.9-5.9	20.0 / 18.0	1.0 / 1.2	8	8	30.0 / -	22.0	45.0	-0.9	7.5	450 / 500
> MMA-495933-Q5	Q5	4.9-5.9	10.5 / 10.0	-	9.6	4.8	33.0 / 32.5	26.0	46.0	-1.0	7.5	600 / -

## Wideband and Narrowband Power Amplifiers

Model	Pkg /Chip	Freq	Linear Gain	Gain Flatness	Input RL	Output RL	NF	Pout @ -1 dB	Vgs	Vdd	DC Current
> New	QFN	(GHz)	Typ/Min (dB)	Typ/Max ± (dB)	Typ (dB)	Typ (dB)	Typ (dB)	Typ/Min (dBm)	(V)	(V)	(mA)
> MMA-021015	Chip	2-10	18.0 / -	2.5 / -	-12	-15	4.8	17.0 / -	NA	6.0	89 / -
> MMA-022028	Chip	2-20	8.0 / 6.0	1.0 / -	10	10	4.5	28.0 / 26.0	-0.7	8.0	380 / 500
> MMA-061829	Module	6-18	8.0 / 6.0	1.0 / -	10	10	5.5	29.0 / 27.0	-0.7	8.0	380 / 500
> MMA-121630	Chip	12-16	26.0 / 24.0	2.0 / -	7	8	5.5	31.0 / 29.0	-0.7	8.0	560 / 650

## Broadband Gain Block Amplifiers

Model	Pkg /Chip	Freq	Linear Gain	Gain Flatness	Input RL	Output RL	NF	Pout @ -1 dB	OIP3	Vdd	DC Current
> New		(GHz)	Typ/Min (dB)	Typ/Max ± (dB)	Typ (dB)	Typ (dB)	Typ (dB)	Typ (dBm)	Typ (dBm)	(V)	(mA)
> MHA-054020	Chip	.05-4	17.5 / -	0.8	13	15	4.5	18.5	38.0	5.0	100 / -
> MHA-054020-89	89	.05-4	17.5 / -	0.8	13	15	4.5	18.5	38.0	5.0	100 / -
> MMA-020624-Q3	Q3	2.0-6.0	17.0 / 15.0	1.0 / 1.5	12	12 <sup>(1)</sup> /10 <sup>(2)</sup>	3.5	25.0	40.0	8.0	250 / 300
> MMA-053223-Q3	Q3	.5-3.2	12.0 / -	1.5	10	10	3.5	24.0	42.0	6.0	120 / 200
> MMA-054025-Q3	Q3	.5-4	11 / -	1.0	10	10	3.5	25.0	44.0	7.5	- / 350

<sup>(1)</sup> @ 2-4 GHz, <sup>(2)</sup> @ 4-6 GHz

Contact Factory For Additional Information On Custom MMICs, Pricing and Delivery

Packaged MMICs are also available in chip form - contact factory

BLUE - In Production | BLACK - Engineering Samples Available, Production Starts December 2008

Over 25 Years of Technical Expertise and Innovation

# Standard GaAs FETs / PHEMTs



- Ultra Linear, High Dynamic Range, Low Phase Noise
- GaAs Process is Approved for Space Applications with Proven Reliability
- Commercial, Industrial, Military, and Space Grades
- 100% Wafer Bond Pull, Die Shear, Wafer DC Burn In, and Bake Tests in Evaluation per MIL-PRF-38534
- 100% Die Probe Test with Data Recorded
- 100% Visual Inspection (to level 1, 3, or 4)
- 100% Idss Match to Provide Performance Consistency
- RF Sample Test Capability Available Upon Request
- Standard and Custom Device Specifications
- High-Rel and Space-Rel Screening Options Available
- RoHS (lead-free) Compliant Product Available

MwT Standard GaAs FETs/ PHEMTs RF Properties (DC Properties Listed on the next page)

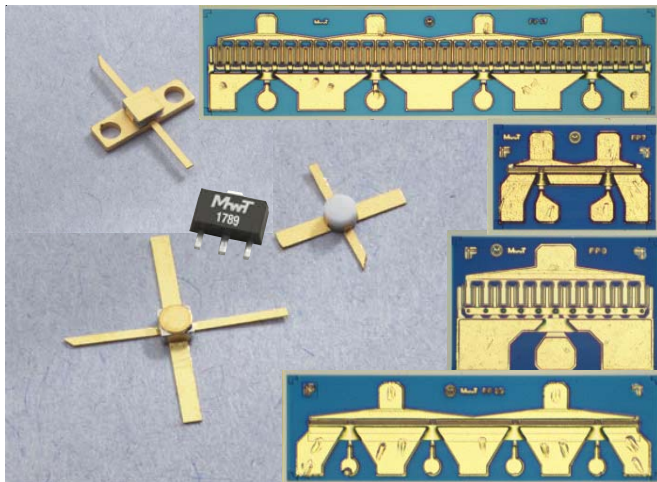
Model	Package Available Sealed/ Hermetic	Gate Width/ Length	Gate Layout Method	Gate Drain Source Bond Qty	Chip Thickness & VIA mil, y/n	S.S. Gain @12GHz Typ/Min dB	N. F. @12GHz Typ/Max dB	Ga @ NF @12GHz Typ/Min dB	P-1dB @ 12GHz Typ/Min dBm	IP3 @ 12GHz Typ dBm	Nominal Chip Size um • um	Ideal Circuit
► New		um										
MwT-1	70, 73 / 71	630/0.3	single stripe	1, 1, 2	5, no	10.0/ 9.0	2.0/ -	7.0/ -	24.0/23.0	-	775 • 241	FB Amp
MwT-2	70, 73 / 71	630/0.3	single stripe	2, 2, 3	5, no	8.5/ 8.0	-/ -	-/ -	24.5/23.0	-	775 • 241	BA Amp
MwT-3	70, 73 / 71	300/0.3	single stripe	1, 1, 2	5, no	11.0/ 10.0	-/ -	-/ -	21.0/20.0	-	406 • 241	BA Amp
MwT-4	70, 73 / NA	180/0.3	single stripe	1, 1, 2	5, no	9.0/ 8.0	1.5/ 1.8	9.0/ 8.0	14.0/13.0	-	356 • 241	Osc & Amp
MwT-5	NA / NA	2*300/0.3	dual gate	3, 1, 2	5, no	13.0/ 12.0	3.5/ -	11.0/ -	19.0/15.0	-	406 • 241	Buffer Amp
MwT-7	70, 73 / NA	250/0.3	single stripe	2, 2, 2	5, no	10.5/ 10.0	2.0/ -	8.0/ -	20.0/18.0	-	356 • 241	BA/SE Amp
MwT-LP7	70, 73 / NA	250/0.3	single stripe	2, 2, 2	5, no	10.5/ 10.0	2.0/ -	8.0/ -	20.0/18.0	-	356 • 241	Oscillator
MwT-8	71	2400/0.3	Interdigit	2, 2, 3	4, no	7.5/ 7.0	-	-	28.0/27.0	-	673 • 305	Power Amp
MwT-A9	70, 73 / 71	750/0.3	single stripe	1, 1, 2	5, no	9.5/ 8.5	1.8/ -	6.5/ 6.0	25.5/23.0	-	419 • 292	FB Amp
MwT-A989	sot89	750/0.5	Interdigit	1, 1, 2	4, no	17.0/15.0 <sup>(1)</sup>	0.9 <sup>(1)</sup>	-	25.0/23.0	40	419 • 292	Power Amp
► MwT-A989SB	sot89	750/0.5	Interdigit	1, 1, 2	4, no	17.0/15.0 <sup>(1)</sup>	0.9 <sup>(1)</sup>	-	25.0/23.0	40	419 • 292	Power Amp
MwT-10	NA	83/0.3	single stripe	1,1,2	5, no	4.5/ 5.5	4.5/ 5.0	-/ -	11.0/12.0	-	279 • 241	BA Amp
► MwT-11	71	2400/0.3	Interdigit	2, 2, 3	4, no	9.0/ 7.0	-	-	30.0/28.0	-	775 • 343	Power Amp
MwT-16	-/ -	900/0.3	single stripe	6, 2, 7	5, no	8.5/ 7.5	-/ -	-/ -	27.0/26.0	-	1067 • 241	BA Amp
MwT-H17	89 / 71	2400/0.8	Interdigit	4, 4, 5	5, no	7.0/ 6.0	(2)	-	29.5/28.5	45/-	1130 • 279	BA/FB Amp
MwT-1789HL	sot89	2400/0.8	Interdigit	4, 4, 5	4, no	-	(3)	14.0 <sup>(1)</sup>	28.0	46	1130 • 279	High Linearity
MwT-1789LN	sot89	2400/0.8	Interdigit	4, 4, 5	4, no	-	(4)	16.0 <sup>(1)</sup>	28.0	46	1130 • 279	Low Noise
MwT-1789SB	sot89	2400/0.8	Interdigit	4, 4, 5	4, no	-	(3)	18.0 <sup>(1)</sup>	28.0	44	1130 • 279	Power Amp
► MwT-17Q3	QFN	2400/0.8	Interdigit	4, 4, 5	4, no	18.0/16.0 <sup>(1)</sup>	1.5 <sup>(1)</sup>	-	28.0/27.0	46	1130 • 279	Power Amp
MwT-H22	71	4800/0.5	Interdigit	6, 6, 7	4, no	12.0/ 9.0	-	-	33.0/31.0	48	1651 • 508	Power Amp
► MwT-H22Q4	QFN	4800/0.5	Interdigit	6, 6, 7	4, no	13.5/12.0 <sup>(5)</sup>	-	-	33.0/32.0	48	1651 • 508	Power Amp
► MwT-H25	-	14400/0.5	Interdigit	6, 6, 7	4, no	10.0/ 9.0	-	-	37.5/36.0	48	2311 • 508	Power Amp
► MwT-PH5	-	300/0.3	single stripe	1, 1, 2	4, no	18.0/ 15.0	2.0/ -	12.0/ -	20.0/18.0	-	406 • 241	Power Amp
MwT-PH7	70, 73 / 71	250/0.3	single stripe	2, 1, 2	4, no	13.5/ 12.0	-	-	24.0/22.0	-	356 • 241	Medium pow
► MwT-PH8	71	1200/0.3	Interdigit	2, 2, 3	4, no	10.0/ 9.0	-	-	30.0/29.0	-	673 • 305	Medium pow
MwT-PH9	70, 73 / 71	750/0.3	single stripe	1, 1, 2	4, no	10.0/ 9.0	-	-	27.0/26.0	-	419 • 292	Power Amp
MwT-PH11	71	2400/0.3	Interdigit	2, 2, 3	4, no	9.0/ 7.0	-	-	32.0/30.0	42	775 • 343	Power Amp
► MwT-PH15	70, 73 / 71	630/0.3	single stripe	3, 2, 5	4, no	12.0/ 10.0	-	-	28.5/27.0	-	775 • 241	Medium pow
► MwT-PH15QACSB	QFN	630/0.3	single stripe	3, 2, 5	4, no	11.0/ -	-	-	25.0/ -	-	775 • 241	Medium pow
► MwT-PH16	71	900/0.3	single stripe	6, 2, 7	4, no	11.5/ 10.0	-	-	30.0/28.5	-	1067 • 241	Medium pow
► MwT-PH16A	-	1600/0.25	Interdigit	4, 4, 5	4, no	11.0/ 9.5	-	-	31.0/29.0	-	1126 • 330	Medium pow

SB = Self-Biased (1) @2.0GHz, (2) noise figure = 0.8dB @ 0.9GHz, (3) noise figure = 3.0dB @ 2.0GHz, (4) noise figure = 1.3dB @ 2.0GHz, (5) @ 4.0GHz

Over 25 Years of Technical Expertise and Innovation



# Standard GaAs FETs / PHEMTs



MwT Standard GaAs FETs / PHEMTs DC Properties (RF Properties Listed on the previous page)

Model	Device Type	I <sub>dss</sub> Range Min/Max mA	G <sub>m</sub> Tested Vds/Vgs V/V	G <sub>m</sub> Typ/Min mS	V <sub>p</sub> Tested at Vds/Ids V/mA	V <sub>p</sub> Typ/Max (- V)	Bvgso Tested I <sub>gs</sub> (- mA)	Bvgso Typ/Min (- V)	Bvgdo Tested I <sub>gd</sub> (- mA)	Bvgdo Typ/Min V/V	V <sub>ds</sub> Absolut Max V	Chip R <sub>th</sub> Typ OC/W
➤ New												
MwT-1	MESFET	60 / 240	4.0 / 0.0	120 / 90	3.0 / 4.0	2.0 / 5.0	1.0	10.0 / 5.0	1.0	10.0 / 6.0	6.0	80
MwT-2	MESFET	60 / 240	4.0 / 0.0	100 / 75	3.0 / 4.0	2.0 / 5.0	0.4	12.0 / 6.0	0.4	12.0 / 8.0	7.0	80
MwT-3	MESFET	30 / 120	4.0 / 0.0	55 / 35	3.0 / 2.0	2.0 / 5.0	0.2	12.0 / 6.0	0.2	12.0 / 8.0	7.0	150
MwT-4	MESFET	18 / 66	3.0 / 0.0	35 / 27	3.0 / 1.0	1.5 / 4.0	0.2	8.0 / 5.0	0.2	8.0 / 6.0	6.0	250
MwT-5	MESFET	30 / 110	2.0 / 0.0	40 / 23	3.0 / 0.0	2.0 / 4.5	0.4	8.0 / 5.0	0.4	10.0 / 7.0	6.5	150
MwT-7	MESFET	26 / 98	3.0 / 0.0	45 / 36	3.0 / 1.0	1.5 / 4.5	0.4	8.0 / 5.0	0.4	8.0 / 6.0	6.0	180
MwT-LP7	MESFET	38 / 98	3.0 / 0.0	45 / 36	3.0 / 1.0	1.5 / 4.5	0.4	8.0 / 5.0	0.4	8.0 / 6.0	6.0	180
MwT-8	MESFET	120 / 480	2.5 / 0.0	160 / 144	3.0 / 5.0	2.0 / 5.0	1.2	12.0 / 8.0	1.2	12.0 / 8.0	7.5	45
MwT-A9	MESFET	78 / 282	2.0 / 0.0	120 / 95	3.0 / 5.0	2.0 / 5.0	1.0	10.0 / 5.0	1.0	10.0 / 6.0	6.0	70
MwT-A989	MESFET	100 / 200	2.0 / 0.0	90 / 120	3.0 / 5.0	2.5 / 5.0	1.0	10.0 / 5.0	1.0	10.0 / 6.0	8.0	75
➤ MwT-A989SB	MESFET	100 / 200	2.0 / 0.0	90 / 120	3.0 / 5.0	2.5 / 5.0	1.0	10.0 / 5.0	1.0	10.0 / 6.0	8.0	75
MwT-10	MESFET	8 / 30	3.0 / 0.0	12 / 16	3.0 / 0.5	1.5 / 4.0	0.1	4.0 / 7.0	0.1	5.0 / 7.0	5.0	450
➤ MwT-11	MESFET	240 / 920	2.5 / 0.0	380 / 290	3.0 / 16.0	2.0 / 5.0	2.4	12.0 / 8.0	2.4	12.0 / 8.0	8.0	28
MwT-16	MESFET	90 / 360	2.0 / 0.0	130 / 108	3.0 / 6.0	2.0 / 5.0	0.6	12.0 / 6.0	0.6	12.0 / 8.0	7.0	55
MwT-H17	MESFET	240 / 920	2.0 / 0.0	380 / 290	3.0 / 6.0	2.5 / 5.0	1.6	12.0 / 6.0	1.6	12.0 / 8.0	7.0	33
MwT-1789HL	MESFET	440 / 680	2.5 / 0.0	380	3.0 / 16.0	2.0 / 5.0	2.4	12.0 / 6.0	2.4	12.0 / 9.0	8.0	35
MwT-1789LN	MESFET	440 / 680	2.5 / 0.0	380	3.0 / 16.0	2.0 / 5.0	2.4	12.0 / 6.0	2.4	12.0 / 9.0	8.0	35
MwT-1789SB	MESFET	440 / 680	2.0 / 0.0	380	3.0 / 16.0	2.5 / 5.0	2.4	12.0 / 6.0	2.4	12.0 / 9.0	8.0	30
➤ MwT-17Q3	MESFET	440 / 680	2.5 / 0.0	380	3.0 / 16.0	2.0 / 5.0	2.4	12.0 / 6.0	2.4	12.0 / 9.0	8.0	35
MwT-H22	MESFET	800 / 1200	2.5 / 0.0	650 / 500	3.0 / 30.0	2.0 / 5.0	5.0	12.0 / 8.0	0.5	14.0 / 12.0	9.0	12
➤ MwT-22Q4	MESFET	800 / 1200	2.5 / 0.0	650	3.0 / 30.5	2.0 / 5.0	5.0	12.0 / 8.0	5.0	14.0 / 12.0	9.0	12
➤ MwT-H25	MESFET	2000/2600	2.5 / 0.0	1500 / 1000	3.0 / 150.0	2.0 / 5.0	14.0	12.0 / 8.0	14.0	16.0 / 14.0	12.0	6
➤ MwT-PH5	PHEMT	40 / 120	2.5 / 0.0	60 / 40	3.0 / 2.0	1.2 / 2.5	0.4	12.0 / 6.0	0.4	13.0 / 10.0	7.0	150
MwT-PH7	PHEMT	50 / 122	2.5 / 0.0	80 / 50	3.0 / 1.0	1.2 / 2.5	0.4	12.0 / 6.0	0.4	12.0 / 8.0	7.0	150
➤ MwT-PH8	PHEMT	240 / 600	2.5 / 0.0	320 / 240	3.0 / 8.0	1.2 / 2.5	1.2	12.0 / 6.0	1.2	13.0 / 10.0	8.0	40
MwT-PH9	PHEMT	120 / 292	2.5 / 0.0	200 / 150	3.0 / 5.0	1.2 / 2.5	1.0	12.0 / 6.0	1.0	13.0 / 10.0	8.0	56
MwT-PH11	PHEMT	440 / 800	2.0 / 0.0	800 / 450	3.0 / 16.0	1.2 / 2.5	2.4	12.0 / 6.0	2.4	13.0 / 10.0	8.0	24
➤ MwT-PH15	PHEMT	120 / 240	2.5 / 0.0	200 / 130	3.0 / 2.0	1.2 / 2.5	1.0	12.0 / 6.0	1.0	13.0 / 10.0	8.0	65
➤ MwT-PH15QACSB	PHEMT	120 / 240	2.0 / 0.0	200 / 130	--	--	--	--	--	--	8.0	65
➤ MwT-PH16	PHEMT	150 / 360	2.5 / 0.0	280 / 180	3.0 / 3.0	1.2 / 2.5	1.0	12.0 / 6.0	1.0	13.0 / 10.0	8.0	45
➤ MwT-PH16A	PHEMT	300 / 600	2.0 / 0.0	400 / 300	3.0 / 2.0	1.2 / 2.5	2.0	8.0 / 6.0	2.0	13.0 / 10.0	9.0	30

NOTE: Contact Factory For Binning Ranges

**Over 25 Years of Technical Expertise and Innovation**

# Wireless Amplifiers (MPS, ULA and WPS WiMax)



- Miniature, Low Cost, SMT, Flange, & Leadless Options
- Miniature, High Reliability, Hermetic SMT Options
- Low Noise, High Linearity, and Broadband Options
- Suitable for High Dynamic Range LNA Applications
- Suitable for High Linear Driver Amp Gain Stages
- Low VSWR for Improved Cascade Performance
- Single Voltage Supply and Low Current Operation
- Uses MWT's Hi-Rel and Space-Qualified GaAs Devices
- Most Parts are Eutectic Assembly for High Reliability
- Standard and Custom Amplifier Specifications
- High-Rel and Space-Rel Screening Available (class H, K, and S)

## MWT High Linearity Driver Amplifiers

Model (Case Code - XX)	Case Code (- XX) Sealed SMT, Flange	Freq Range (MHz)	Linear Gain Typ/Min (dB)	Gain Flatness Typ/Max ± (dB)	VSWR Input Typ/Max (dB)	VSWR Output Typ/Max (dB)	Noise Figure Typ/Max (dB)	Pout @ -1 dB Typ/Min (dBm)	IP3 Typ/Min (dBm)	DC Voltage Applied (V)	DC Current Typ-Max (mA)
► New											
► MPS-0030H16-XX	02	10-3000	14.5/16.0	0.50/0.80	2.0 / -	2.0 / -	-	27.0 / 25.5	33.5 / -	7.0-8.0	240-270
► MPS-0325A9D-XX	82	300-2500	12.5/13.5	0.20/0.60	1.4 / 1.7	1.2 / 1.7	4.0 / -	25.0 / -	42.0 / 39.0	7.5	300-330
MPS-081017-XX	02	800-1000	15.0/14.0		2.0 / -	2.5 / -	-	28.5 / -	45.0 / 42.0	7.5	380-450
MPS-0810A9-XX	02	800-960	15.0/14.0		1.5 / -	2.0 / -	1.1 / 1.5	20.5 / -	34.0 / -	6.0	160-240
MPS-0810A9D-XX	82, -	800-960	14.0/13.0	0.20/0.30	1.4 / 1.5	1.2 / 1.5	5.0 / -	26.0 / 25.0	42.0 / 41.0	7.5	300-400
MPS-0820A9D-XX	02	800-2050	13.5/12.5		1.4 / -	1.4 / -	5.5 / -	24.0 / -	43.0 / -	6.0	220-280
MPS-093011-XX	82, 85, *	800-1000	16.0/14.0	0.25/0.50	1.5 / -	2.2 / -	6.0 / -	30.0 / -	45.0 / 43.0	7.5	380-450
MPS-1720A9-XX	02	800-960	14.0/13.0		2.1 / 2.2	1.5 / 2.1	1.1 / 1.5	20.0 / -	33.0 / -	6.0	100-140
MPS-172208-XX	82, 85	1900-2000	13.0/12.0	0.20/0.50	2.0 / 2.5	2.0 / 2.5	5.0 / -	26.0 / 25.0	38.0 / -	7.5	380-450
MPS-173011-XX	82, 85, *	1400-1700	14.0/13.0	0.25/0.50	1.5 / -	2.2 / -	6.0 / -	30.0 / -	45.0 / 42.0	7.5	380-450
MPS-1820A9D-XX	82, -, 02	1800-2000	14.0/13.0	0.20/0.30	1.4 / 1.5	1.2 / 1.5	5.0 / -	26.0 / 25.0	42.0 / 41.0	7.5	300-400
MPS-182117-XX	02	1800-2100	14.0/13.0		2.0 / -	2.5 / -	-	28.5 / -	45.0 / 42.0	7.5	380-450
MPS-182217-XX	82, -, 02	1800-2200	14.0/13.0	0.25/0.50	1.5 / -	3.0 / -	6.0 / -	28.5 / -	45.0 / 42.0	7.5	380-450
MPS-2125A9D-XX	82, -, 02	2100-2500	14.0/13.0	0.20/0.50	1.4 / 1.5	1.2 / 1.5	5.0 / -	26.0 / 25.0	42.0 / 41.0	7.5	300-400
MPS-213011-XX	82, 85, 02	1700-2100	14.0/13.0	0.25/0.50	1.5 / -	2.2 / -	6.0 / -	29.0 / -	45.0 / 42.0	7.5	380-450
MPS-242520-XX	-, 83	2400-2500	13.0/12.0	0.30/0.50	3.0 / -	2.0 / -	- / -	36.0 / 35.0	- / -	8.0	750-900
MPS-242717-XX	02	2400-2700	13.0/12.0		2.0 / -	-	-	28.0 / -	45.0 / 42.0	6.0-7.0	380-450
MPS-252730-XX	-, 83	2500-2700	13.0/12.0	0.40/0.60	3.0 / -	2.0 / -	- / -	36.0 / 35.0	- / -	8.0	750-900
MPS-253011-XX	02, 82, 85, *	2400-2700	13.0/12.0	0.25/0.50	1.5 / -	2.2 / -	6.0 / -	29.0 / -	45.0 / 42.0	7.5	380-450
MPS-343517-XX	02, 82	3400-3500	13.0/12.0	0.25/0.50	2.0 / -	2.2 / -	6.0 / -	29.0 / -	45.0 / 42.0	7.5	380-450
MPS-3435A9D-XX	82, -	3400-3500	13.0/12.0	0.20/0.30	1.4 / 1.5	1.3 / 1.5	6.0 / -	24.0 / 23.0	41.0 / 39.0	7.5	300-400
MPS-343617-XX	82	3400-3600	13.0/12.0		2.0 / -	2.2 / -	-	29.0 / -	48.0 / 44.0	7.5	350-420
MPS-343717-XX	02	3400-3700	12.5/11.7		1.5 / -	2.5 / -	-	28.5 / -	45.0 / 42.0	6.0-7.0	330-400
MPS-343717-XX	82	3400-3700	12.5/11.7		1.5 / -	2.5 / -	-	28.5 / -	45.0 / 42.0	6.7	380-450
MPS-363817-XX	82	3600-3800	13.0/12.0		2.0 / -	2.2 / -	-	29.0 / -	48.0 / 44.0	7.5	350-420
ULA 808-XX											
Special Order Only											
ULA 818-XX											
Special Order Only											
ULA 818-XX	82, -	800-1000	15.5/14.0	0.25/0.50	1.5 / -	1.5 / -	- / -	28.0 / -	48.0 / 46.0	8.0	270-350

\* Hermetic Version Available (96 package)

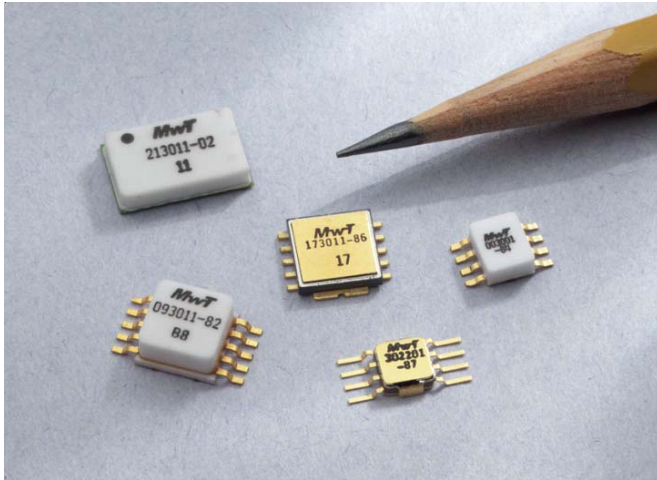
## MWT Standard Low Noise Receiver Amplifiers

Model (Case Code - XX)	Case Code (- XX) Sealed SMT, Flange	Freq Range (MHz)	Linear Gain Typ/Min (dB)	Gain Flatness Typ/Max ± (dB)	VSWR Input Typ/Max (dB)	VSWR Output Typ/Max (dB)	Noise Figure Typ/Max (dB)	Pout @ -1 dB Typ/Min (dBm)	PAE @ -1 dB Typ (%)	IP3 Typ/Min (dBm)	DC Voltage Applied (V)	DC Current Typ/Max (mA)
► New												
MPS-080817P-XX	82, 85, 02	806-849	14.0/13.0	0.20/0.50	2.0/2.5	2.0/2.5	1.1/1.5	28.0/NA	26	44.0/42.0	7.5	330/400
MPS-080817N-XX	82, 85, 02	806-849	13.5/12.0	0.20/0.50	2.0/2.5	2.0/2.5	0.8/1.0	23.0/NA	26	36.0/33.0	7.5	180/250
MPS-0808A9-XX	85	806-849	16.0/14.0	0.20/0.50	2.0/2.5	2.0/2.5	1.1/1.5	22.0/NA	26	36.0/33.0	6.0	180/250
MPS-080917P-XX	85, 02	870-925	14.5/13.0	0.20/0.50	2.0/2.5	2.0/2.5	1.1/1.5	28.0/NA	26	44.0/42.0	7.5	330/400
MPS-080917N-XX	82, 85, 02	870-925	13.5/12.0	0.20/0.50	2.0/2.5	2.0/2.5	0.8/1.0	23.0/NA	26	36.0/33.0	7.5	180/250
MPS-0809A9-XX	82, 85	870-925	16.0/14.0	0.20/0.50	2.0/2.5	2.0/2.5	1.1/1.5	22.0/NA	26	36.0/33.0	6.0	180/250
MPS-090917P-XX	82, 85, 02	925-960	14.5/13.0	0.20/0.50	2.0/2.5	2.0/2.5	1.1/1.5	28.0/NA	26	44.0/42.0	7.5	330/400
MPS-090917N-XX	85, 02	925-960	13.5/12.0	0.20/0.30	2.0/2.5	2.0/2.5	0.8/1.0	23.0/NA	26	36.0/33.0	7.5	180/250
MPS-0909A9-XX	82, 85	925-960	16.0/14.0	0.20/0.50	2.0/2.5	2.0/2.5	1.1/1.5	22.0/NA	26	36.0/33.0	6.0	180/250
MPS-1718A9-XX	82, 85	1710-1785	15.5/14.0	0.20/0.50	2.0/2.5	2.0/2.5	1.1/1.5	22.0/NA	26	36.0/33.0	6.0	100/150
MPS-1820A9-XX	82, 85	1850-1910	15.5/14.0	0.20/0.50	2.0/2.5	2.0/2.5	1.1/1.5	22.0/NA	26	36.0/33.0	6.0	100/137
MPS-081017N-XX	02		800-960	13.5/12.0		2.0 / -	2.0 / -	1.0 / 1.3	21.0 / -	36.0 / -	6.0-7.0	180-250
MPS-081017P-XX	02		800-960	14.0/13.0		2.0 / -	2.0 / -	1.3 / 1.7	26.0 / -	44.0 / -	6.0-7.0	330-400

Note: Contact factory for hermetic package and low cost surface mount package.

Over 25 Years of Technical Expertise and Innovation

# Wireless Amplifiers (MPS, ULA and WPS WiMax)



## MwT Standard Broad Band General Purpose Amplifiers

Model (Case Code - XX)	Case Code (- XX) Sealed SMT, Flange	Case Code (- XX) Hermetic SMT	Freq Range (MHz)	Linear Gain Typ/Min (dB)	Gain Flatness Typ/Max ± (dB)	VSWR Input Typ/Max	VSWR Output Typ/Max	Noise Figure Typ/Max (dB)	Pout @ -1 dB Typ/Min (dBm)	PAE @ -1 dB Typ (%)	IP3 Typ/Min (dBm)	DC Voltage Applied (V)	DC Current Typ/Max (mA)
► New													
► MPS-002701-XX	84	-	00-2700	11.5/10.5	0.5/0.8	2.0/-	1.8/-	6.0/-	20.0/ 19.0	-	35.0/-	5.0	120/ 160
MPS-003001-XX	84	87	20-3000	11.5/10.5	0.80/1.20	1.6/ 2.5	1.6/ 2.5	4.0*/ -	21.0/ 19.0	30*	34.0/-	5.0	90/ 160
MPS-013001-XX	84	-	100-3000	11.5/10.5	0.80/1.20	1.6/ 2.5	1.6/ 2.5	3.5*/5.0*	21.0/ 19.0	30	34.0/-	5.0	90/ 160
► MPS-032701A-XX	82	96	300-2700	20.0/-	1.0/-	2.0/-	2.0/-	5.0/-	20.0/ 19.0	-	34.0/-	5.0	320/ 360
► MPS-0425A9D-XX	82	96	400-2500	14.0/13.0	-	1.4/ 1.7	1.2/ 1.7	-	25.0/-	-	42.0/-	7.5	300/ 330
MPS-082508-XX	82, 85	96	800-2500	13.0/11.0	0.50/1.00	2.0/ 2.5	2.0/ 2.5	5.0/-	27.0/ 26.0	25	38.0/ 36.0	12.0	200/ 300
MPS-302201-XX	-	87	100-3000	11.5/10.5	0.50/0.80	1.6/ 2.5	1.6/ 2.5	3.5*/5.0*	22.0/ 20.5	30	35.0/-	5.0	90/ 160

\* NF - See Data Sheet

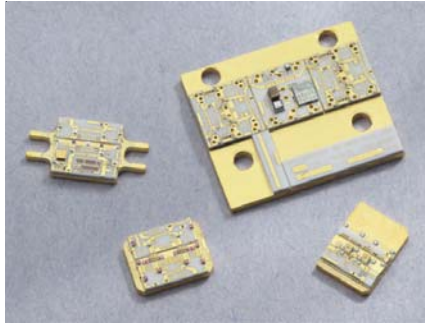
## WPS - WiMax Amplifiers

Model (Case Code - XX)	Case Code Sealed	Freq Range (MHz)	Linear Gain Typ (dB)	Gain Flatness Typ/Max ± (dB)	VSWR Input Typ	VSWR Output Typ	P1dB Typ (dBm)	Pout @ 2.0% EVM Typ (dBm)	IP3 Typ/Min (dBm)	DC Voltage (V)	DC Current Typ/Max (mA)
► New											
WPS-242717-XX	02, 82	2450-2700	13.0	0.30/0.60	1.5	2.5	28.5	22.0	45.0	7.5	330
WPS-252717-XX	82	2500-2700	13.0	0.30/0.60	1.5	2.5	28.5	22.0 <sup>(1)</sup>	45.0	7.5	300
WPS-252724-XX	02, 99	2500-2700	14.0	0.30/0.60	1.5	2.5	36.0	29.0	50.0	8.5	1200
► WPS-303322-XX	02	3000-3300	13.0	0.30/0.60	1.5	2.5	32.0	26.0 <sup>(1)</sup>	47.0	8.0	600
WPS-343617-XX	82	3400-3600	13.0	0.30/0.60	1.5	2.5	29.0	22.0 <sup>(1)</sup>	48.0	7.5	380-450
WPS-343717-XX	82	3400-3700	13.0	0.30/0.60	1.5	2.5	29.0	22.0 <sup>(1)</sup>	45.0	7.5	380-450
WPS-343722-XX	02	3400-3700	13.0	0.30/0.60	1.5	2.5	32.0	26.0 <sup>(1)</sup>	47.0	8.0	600
WPS-343724-XX	02, 99	3400-3700	14.0	0.30/0.60	1.5	2.5	36.0	29.0	50.0	8.0	1200
WPS-363817-XX	82	3600-3800	13.0	0.30/0.60	1.5	2.5	29.0	22.0 <sup>(1)</sup>	48.0	7.5	380-450
► WPS-444922-XX	02	4400-4900	11.0	0.30/0.60	1.5	2.5	32.0	26.0	47.0	7.5	600
► WPS-445122-XX	02	4400-5100	11.0	0.30/0.60	1.5	2.5	32.0	26.0	47.0	7.5	600
► WPS-495122-XX	02	4900-5100	11.0	0.30/0.60	1.5	2.5	32.0	26.0	47.0	7.5	600
WPS-495917-XX	02	4900-5900	13.0	0.30/0.60	1.5	2.5	28.5	22.0	44.0	7.5	300
WPS-495922-XX	02	4900-5900	11.0	0.30/0.60	1.5	2.5	32.0	26.0	47.0	7.5	600
► WPS-545922-XX	02	5400-5900	11.0	0.30/0.60	1.5	2.5	32.0	26.0	47.0	7.5	600

<sup>(1)</sup> @ 2.5% EVM

**Over 25 Years of Technical Expertise and Innovation**

# Hybrid Microwave Modules



- Miniature Drop-In Hybrid Amplifiers
- Low Noise, High Gain, and High Power Options
- Gain Block, Temp Comp, and Regulator Options
- Low VSWR for Improved Cascade Performance
- Single Voltage Supply and Low Current Design
- Uses MwT's Space-Qualified GaAs Devices and Thin Film Substrates
- 100% Eutectic Assembly Technique Assures High Reliability
- Standard and Customer Specific Specifications
- Connectorized Amplifier Options Upon Request
- High-Rel and Space-Rel Qualification Available

## MwT Standard Gain Block Modules

Model	Freq Range	Linear Gain	Gain Flatness	VSWR : 1	Reverse Isolation	Noise Figure	Pout @ -1 dB	IP3	Current @ +8 V	Case Code	Carrier Size
	GHz	Typ/Min dB	Typ/Max ± dB	In & Out Typ/Max	Typ dB	Typ dB	Typ/Min dBm	Typ	Typ/Max mA		mil x mil
► New											
MwT 0206-11P2	2.0-6.0	6.0 / 5.0	0.4 / 0.6	1.7 / 2.0	-18.0	7.0	30.0 / 29.5	41.0	850 / 950	S/Z-1	300 • 600
MwT 0206-1G1	2.0-6.0	16.0 / 15.0	0.6 / 0.6	1.8 / 2.0	-30.0	4.5	17.0 / 16.0	27.0	150 / 180	U/L-1	300 • 600
MwT 0206-1G2	2.0-6.0	18.0 / 17.0	0.5 / 0.6	1.8 / 2.0	-30.0	3.5	19.0 / 18.0	29.0	150 / 200	U/L-1	300 • 600
MwT 0206-2P2	2.0-6.0	10.5 / 10.0	0.4 / 0.6	1.5 / 1.8	-20.0	4.5	24.5 / 24.0	35.0	220 / 260	S/Z-1	300 • 600
MwT 0206-7G2	2.0-6.0	11.0 / 10.5	0.4 / 0.6	1.5 / 1.8	-20.0	3.0	15.0 / 14.0	25.0	60 / 80	S/Z-1	300 • 600
MwT 0206-9P2	2.0-6.0	11.0 / 10.0	0.4 / 0.6	1.7 / 2.0	-20.0	4.0	26.0 / 25.0	37.0	260 / 290	S/Z-1	300 • 600
MwT 0206-A9G1	2.0-6.0	17.0 / 16.0	0.5 / 0.6	1.8 / 2.0	-30.0	1.5	15.0 / 14.0	25.0	50 / 55	S/Z-1	300 • 600
► MwT 0206-A9N2	2.0-6.0	15.0 / 12.5	2.0 / 2.5	1.7 / 2.0	-17.0	1.0	15.0 / 13.0	25.0	50 / 70	S/Z-1	300 • 600
MwT 0618-2P1	6.0-18.0	5.0 / 4.5	0.4 / 0.6	1.5 / 1.7	-20.0	7.0	24.8 / 24.0	35.0	200 / 250	S/Z-2	250 • 500
MwT 0618-2P2	6.0-18.0	5.5 / 5.0	0.3 / 0.5	1.5 / 1.7	-20.0	7.0	25.5 / 24.5	36.0	220 / 275	S/Z-2	250 • 500
MwT 0618-3P1	6.0-18.0	6.0 / 5.0	0.4 / 0.6	1.5 / 1.7	-20.0	6.5	20.5 / 20.0	30.0	100 / 120	S/Z-2	250 • 500
MwT 0618-3P2	6.0-18.0	6.5 / 6.0	0.3 / 0.5	1.5 / 1.7	-20.0	6.5	21.5 / 21.0	31.0	100 / 120	S/Z-2	250 • 500
MwT 0618-4N1	6.0-18.0	7.5 / 7.0	0.4 / 0.6	1.5 / 1.7	-20.0	4.5	14.0 / 12.0	25.0	40 / 60	S/Z-2	250 • 500
MwT 0618-4N2	6.0-18.0	8.0 / 7.5	0.4 / 0.6	1.5 / 1.7	-20.0	4.0	14.0 / 11.0	25.0	40 / 60	S/Z-2	250 • 500
MwT 0618-H4N2	6.0-18.0	9.0 / 8.5	0.4 / 0.6	1.5 / 1.7	-20.0	3.0	10.0 / 7.0	20.0	40 / 60	S/Z-2	250 • 500
MwT 0618-5G1	6.0-18.0	10.0 / 9.5	0.4 / 0.6	1.5 / 1.7	-30.0	5.5	16.0 / 14.0	26.0	90 / 100	S/Z-2	250 • 500
MwT 0618-5G2	6.0-18.0	10.5 / 10.0	0.4 / 0.6	1.5 / 1.7	-30.0	5.0	18.0 / 15.5	28.0	100 / 120	S/Z-2	250 • 500
MwT 0618-7G2	6.0-18.0	7.5 / 7.0	0.4 / 0.6	1.5 / 1.7	-20.0	5.0	15.0 / 14.0	25.0	60 / 80	S/Z-2	250 • 500
MwT 0618-12P2	6.0-18.0	4.6 / 4.2	0.4 / 0.6	1.5 / 1.7	-20.0	7.5	27.5 / 27.0	38.0	350 / 450	S/Z-2	250 • 500
MwT 0618-H15P2	6.0-18.0	8.5 / 7.5	0.4 / 0.6	1.5 / 1.7	-20.0	7.5	27.0 / 26.0	34.0	250 / 275	S/Z-2	250 • 500
MwT 0618-H15P3	6.0-18.0	7.5 / 6.5	0.4 / 0.6	1.5 / 1.7	-20.0	7.5	29.0 / 28.0	36.0	250 / 300	S/Z-2	250 • 500
MwT 0618-H16P3	6.0-18.0	5.0 / 6.0	0.8 / 1.2	1.7 / 2.0	-17.0	8.0	30.0 / 29.0	38.0	450 / 550	S/Z-2	250 • 500
► MwT 0618-H5G2	6.0-18.0	15.0 / 14.0	0.5 / 1.0	1.7 / 2.0	-17.0	3.0	20.0 / 17.0	29.0	80 / 120	S/Z-2	250 • 500
MwT 0618-H7P2	6.0-18.0	9.0 / 9.5	0.5 / 1.0	1.7 / 2.0	-17.0	5.5	21.0 / 24.0	33.0	110 / 150	S/Z-2	250 • 500
MwT 0820-3P1	8.0-20.0	5.0 / 4.5	0.4 / 0.6	1.5 / 1.7	-20.0	7.5	19.0 / 18.0	29.0	100 / 120	S/Z-2	250 • 500
MwT 0820-3P2	8.0-20.0	5.5 / 5.0	0.4 / 0.6	1.5 / 1.7	-20.0	7.0	20.0 / 19.0	29.0	100 / 120	S/Z-2	250 • 500
MwT 0820-4N1	8.0-20.0	6.0 / 5.5	0.4 / 0.6	1.5 / 1.7	-20.0	8.0	14.0 / 12.0	25.0	40 / 60	S/Z-2	250 • 500
MwT 0820-4N2	8.0-20.0	6.5 / 6.0	0.4 / 0.6	1.5 / 1.7	-20.0	4.0	14.0 / 11.0	25.0	40 / 60	S/Z-2	250 • 500
MwT 0820-5G1	8.0-20.0	9.0 / 8.0	0.4 / 0.6	1.5 / 1.7	-28.0	4.0	16.0 / 14.0	26.0	90 / 110	S/Z-2	250 • 500
MwT 0218-4N1	2.0-18.0	6.0 / 5.0	0.8	1.7 / 2.0	-20.0	7.0	15.0 / 14.0	25.0	100 / 120	S/Z-2	250 • 500
MwT 0218-4N2	2.0-18.0	6.5 / 6.0	1.2	1.7 / 2.0	-20.0	8.5	17.0 / 16.0	26.0	160 / 180	S/Z-2	250 • 500
MwT 0218-H4N1	2.0-18.0	12.0 / 11.0	0.8	1.7 / 2.0	-20.0	4.0	6.0 / 5.0	15.0	40 / 50	S/Z-2	250 • 500
MwT 0218-H4N2	2.0-18.0	11.0 / 10.0	0.8	1.7 / 2.0	-20.0	4.0	12.0 / 11.0	24.0	60 / 75	S/Z-2	250 • 500

Note: Typical 2nd Harmonics @ P-1-21.0 dBc Typ

## MwT Standard Voltage Regulator Modules (Each Module Contains Dual Adjustable Voltage Regulators)

Model	Freq Range	Insertion Loss	Ripple Rej @ 120Hz	Pw Diss Per VR	Regulated Voltage	Supply Voltage	Total Sup. Current	Case Code	Carrier Size
	GHz	Typ/Max dB	Min dB	Max Watts	Min / Max V	Typ / Max V	Max mA		milxmil
MwT 0206-VRM	2.0-6.0	- / 0.5	50.0	1.5	7.9 / 8.1	12.0 / 20.0	800	U/L-1	300 • 600
MwT 0618-VRM	6.0-18.0	- / 1.0	50.0	1.5	7.9 / 8.1	12.0 / 20.0	800	U/L-2	250 • 500

## MwT Standard Temperature Compensation Modules

Model	Freq Range	Insertion Loss	Loss Flatness	Atten.	Current @ +8 V	Case Code	Carrier Size
	GHz	Typ/Max dB	± Max dB	Typ / Min dB	Max mA		milxmil
MwT 0206-TCM	2.0-6.0	1.0 / 2.5	0.4 / 0.6	13.0 / 12.0	10 / 20	S/Z-1	300 • 600
MwT 0618-TCM	6.0-18.0	2.5 / 3.0	0.4 / 0.6	13.0 / 12.0	10 / 20	S/Z-2	250 • 500

Over 25 Years of Technical Expertise and Innovation



# Standard, Military, and Hi-Rel Connectorized Amplifiers



Model Number Wide Band Amplifier Type	Freq Range GHz	Linear Gain dB MIN/TYP	Gain Flatness ±dB MAX	Noise Figure dB MAX/TYP	Pout-1dB dBm MIN/TYP	Current @ 12 V mA MAX *	Case Code
AW 052202N	0.5-2	30/33	1.4	2.5/2.2	15/17	300	SL-2
AW 052203	0.5-2	23/26	1.0	3.0/2.5	17/19	260	SL-2
AW 054201N	0.5-4	19/26	1.0	2.5/2.2	15/17	220	SL-2
AW 054203	0.5-4	21/24	1.0	4.5/4.0	16/18	260	SL-2
AW 12201N	1-2	28/31	1.1	2.5/2.2	18/20	225	SL-2
AW 12203	1-2	27/30	1.1	3.5/3.0	27/28	555	SL-2
AW 26201N	2-6	21/23	1.0	2.5/2.2	13/15	155	SL-2
AW 26204	2-6	19/21	1.0	4.5/4.0	23/24	335	SL-2
AW 28201N	2-8	29/32	1.5	3.0/2.5	13/15	175	SL-2
AW 28302	2-8	31/33	1.5	5.5/5.0	23/24	615	SL-3
AW 612301N	6-12	30/32	1.0	3.5/3.0	16/17	240	SH-3
AW 612304	6-12	22/23	1.0	6.5/6.0	27/28	750	SH-4
AW 1218301N	12-18	24/26	0.8	3.5/3.0	14/15	230	SH-3
AW 1218504	12-18	29/31	1.3	7.5/7.0	27/28	1200	SH-6
AW 818301N	8-18	24/26	1.0	3.5/3.0	14/15	230	SH-3
AW 818504	8-18	29/32	1.5	7.5/7.0	27/28	1300	SH-6
AW 618301N	6-18	24/26	1.3	3.5/3.0	14/15	230	SH-3
AW 618302	6-18	19/21	1.3	6.0/5.5	20/21	350	SH-3
AW 618404	6-18	20/22	1.5	7.5/7.0	27/28	1200	SH-5
AW 218201N	2-18	25/28	1.8	5.0/4.5	6/7	135	SH-2
AW 218301N	2-18	24/26	2.0	6.5/6.0	15/16	365	SH-3
AW 218301	2-18	20/22	2.0	6.0/5.5	20/21	500	SH-3
Model Number Temp Comp Amplifier Type	Freq Range GHz	Linear Gain dB MIN/TYP	Gain Flatness ±dB MAX	Noise Figure dB MAX/TYP	Gain vs Temp ±dB MAX	Current @ 12 V mA MAX *	Case Code
AT26301	2-6	21/23	1.0	6.0/5.5	0.8	300	SL-3
AT26401	2-6	36/40	1.5	5.5/5.0	1.0	470	SL-4
AT618401	6-18	22/24	1.0	7.5/7.0	0.8	380	SH-4
AT618501	6-18	31/33	1.3	7.0/6.5	0.8	500	SH-5
Model Number Limiting Amplifier Type	Freq Range GHz	Pin Dynamic dBm MIN/MAX	Noise Power dBm MAX	Pout-sat dBm MIN/MAX	Pout Flatness ±dB MAX	Current @ 12 V mA MAX *	Case Code
AL26501	2-6	-50/10	7.0	+15/+20	1.0	500	SL-5
AL618801	6-18	-50/10	10.0	+15/+20	2.0	800	LH-44
Model Number Low Noise Amplifier Type	Freq Range GHz	Linear Gain dB MIN	Gain Flatness ±dB MAX	Noise Figure dB MAX/TYP	Pout-1dB dBm MIN/TYP	Current @ 12 V mA MAX *	Case Code
AN12201N	1.2-1.8	28/31	0.5	-1.7	15/17	180	CL-1
AN23201N	2.2-2.9	28/31	0.5	-1.7	15/17	180	CL-1
AN45201N	4.4-5.0	25/27	0.5	-1.7	15/17	180	CL-1
AN78201N	7.2-7.8	23/25	0.5	-1.8	14/16	150	CH-1
AN910201N	9.0-10.0	21/23	0.5	-1.8	14/16	150	CH-1
AN1415301N	14.5-15.3	24/27	0.5	-2.1	13/15	200	CH-3
AN1718401N	17.7-18.7	29/32	1.0	-2.8	12/14	250	CH-3
Model Number Med Power Amplifier Type	Freq Range GHz	Linear Gain dB MIN	Gain Flatness ±dB MAX	VSWR In/Out MAX	Pout-1dB dBm MIN/TYP	Current @ 12 V mA MAX *	Case Code
AP45401	4.4-5.0	35.0	0.6	1.5/1.5	30.0/30.5	1400	CL-3
AP67402	5.9-6.4	33.0	0.6	1.5/1.5	33.0/33.5	2700	CL-3
AP78401	7.2-8.4	33.0	0.8	1.5/1.5	30.0/30.5	1450	CH-3
AP910401	9.0-10.0	32.0	0.8	1.5/1.5	30.0/30.5	1450	CH-3
AP1011401	10.7-11.7	27.0	0.8	1.5/1.5	30.0/30.5	1550	CH-3
AP1415401	14.0-14.5	23.0	0.5	1.5/1.5	29.0/30.0	1700	CH-3
AP1718501	17.7-18.7	24.0	1.0	1.8/1.8	26.0/27.0	1250	CH-5
Model Number Telecom Power Amplifier Type	Freq Range GHz	Linear Gain dB MIN	Gain Flatness ±dB MAX	IMD3 (dBc) @ Po dBm/Tone	Pout-1dB dBm MIN/TYP	Current @ 12 V mA MAX *	Case Code
AP1819701	18.1-18.6	30	0.5	-50@+15	27	2300	PH-01
AP1819801	18.1-18.6	35	0.5	-54@+15	29	2700	PH-01

Contact factory for application assistance on custom and standard amplifiers. Hi-Rel and Space-Rel screening are available.

\* Built in voltage regulator.

**Over 25 Years of Technical Expertise and Innovation**

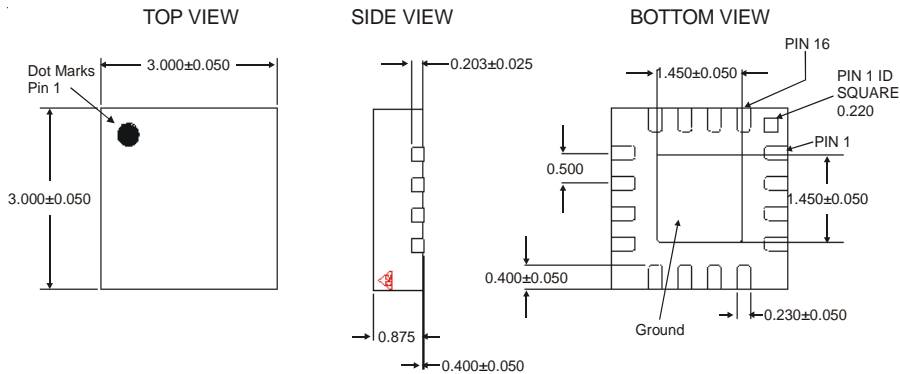


# Outline drawings

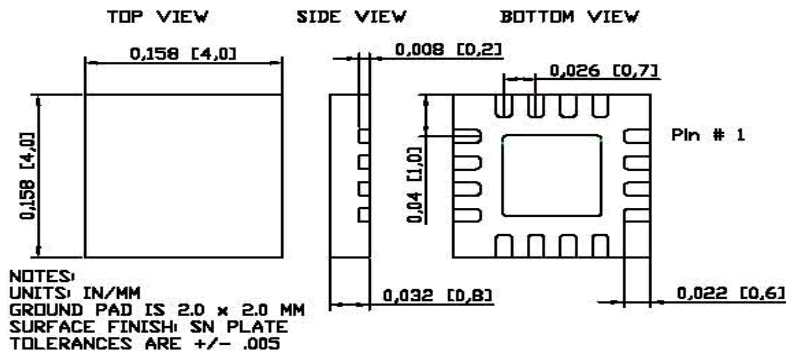
Dimensions in mm



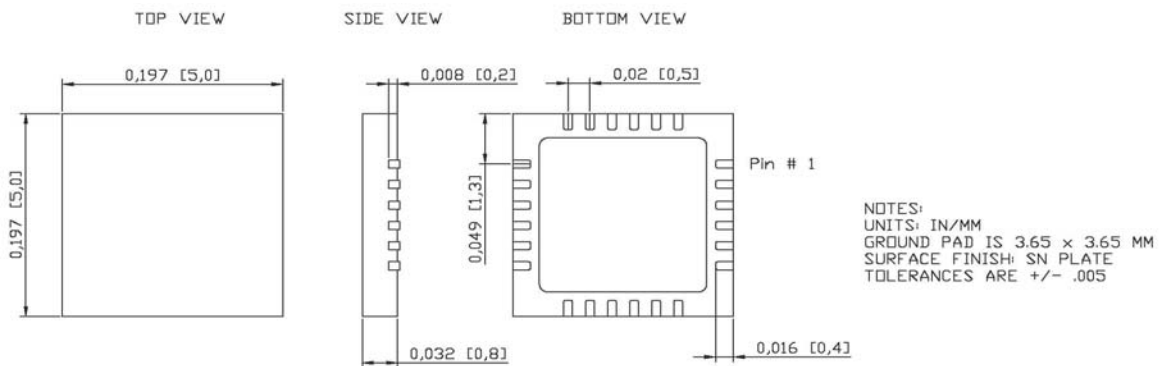
QFN 3 x 3



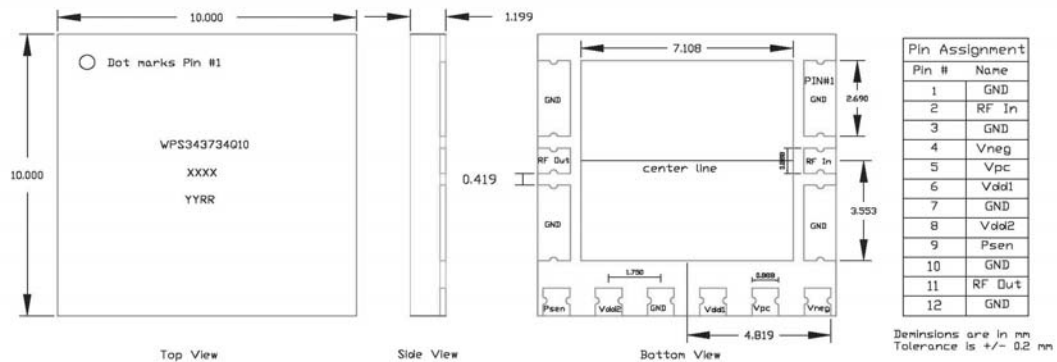
QFN 4 x 4



QFN 5 x 5



QFN 10 x 10

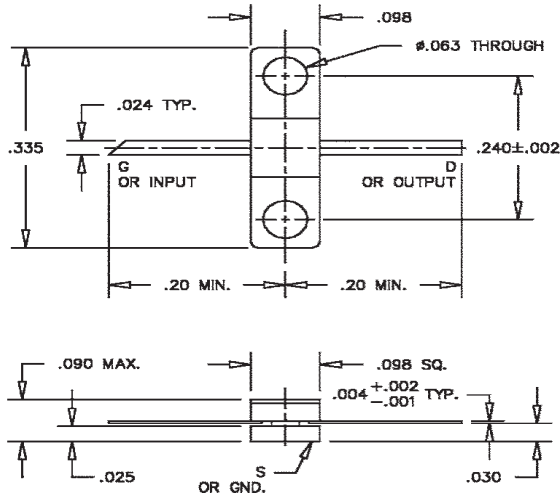


# Outline drawings

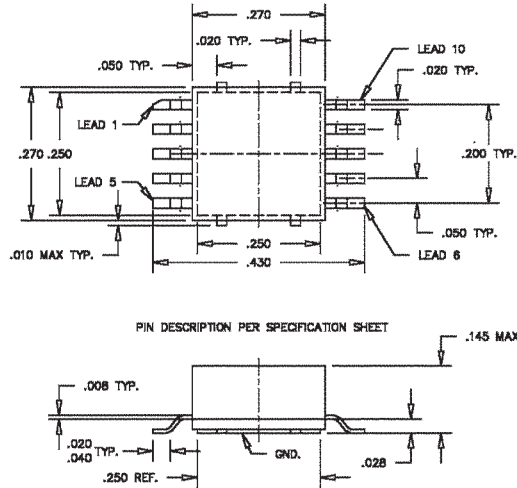
Dimensions in mm and inches (1 mm = 0.0394")



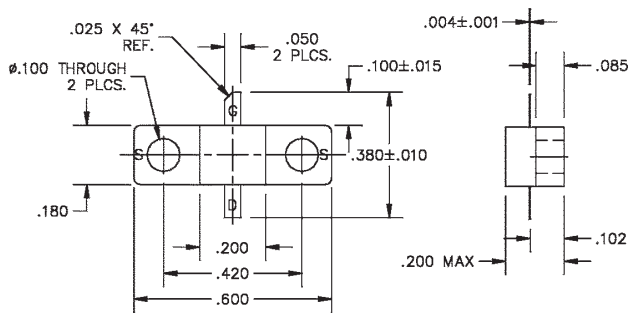
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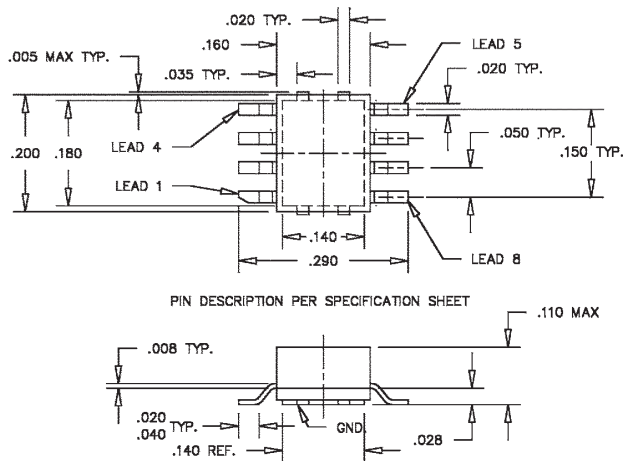
**Package 82**



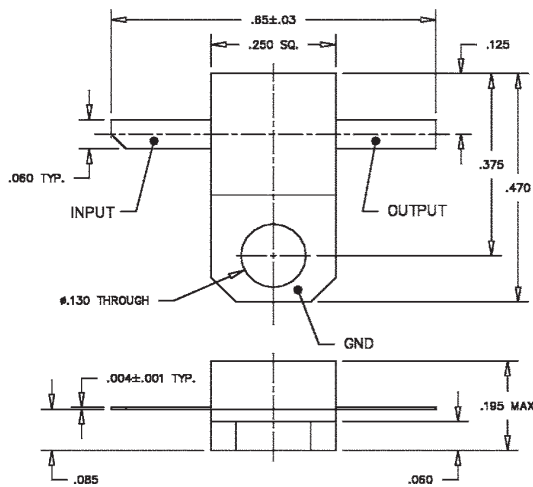
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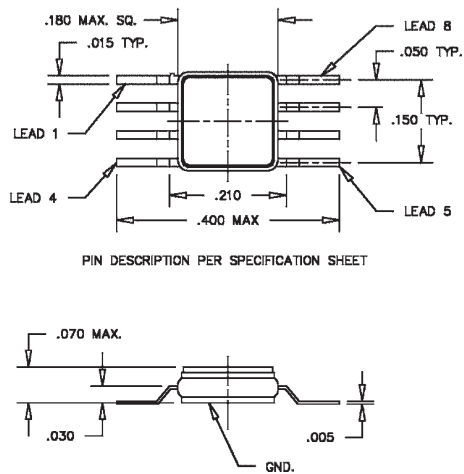
**Package 84**



**Package 85**



**Package 87**



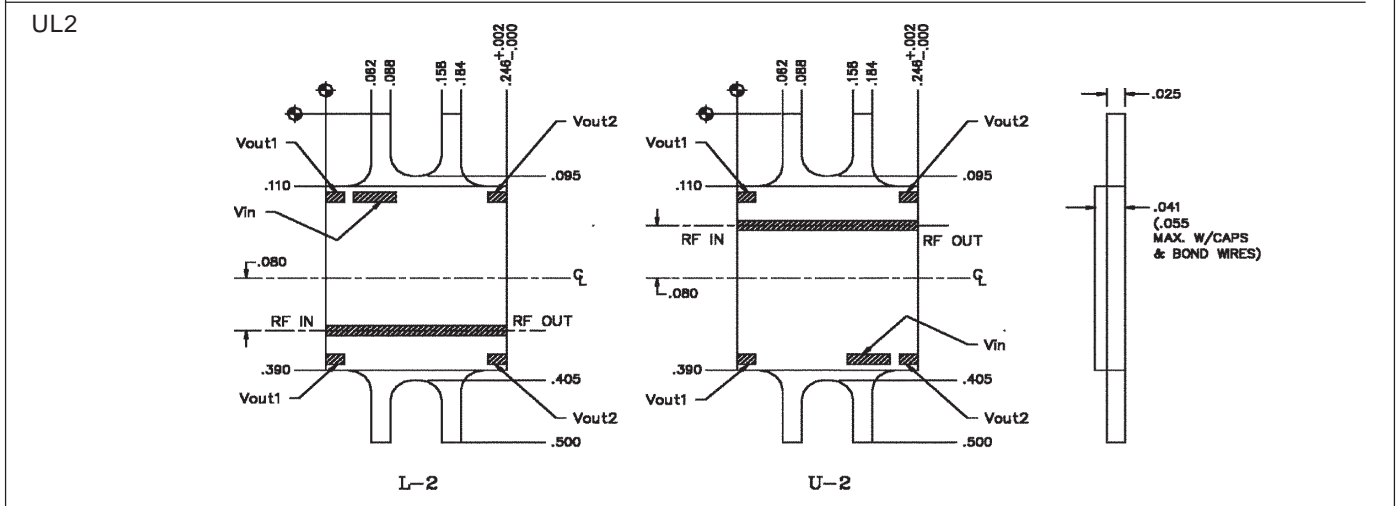
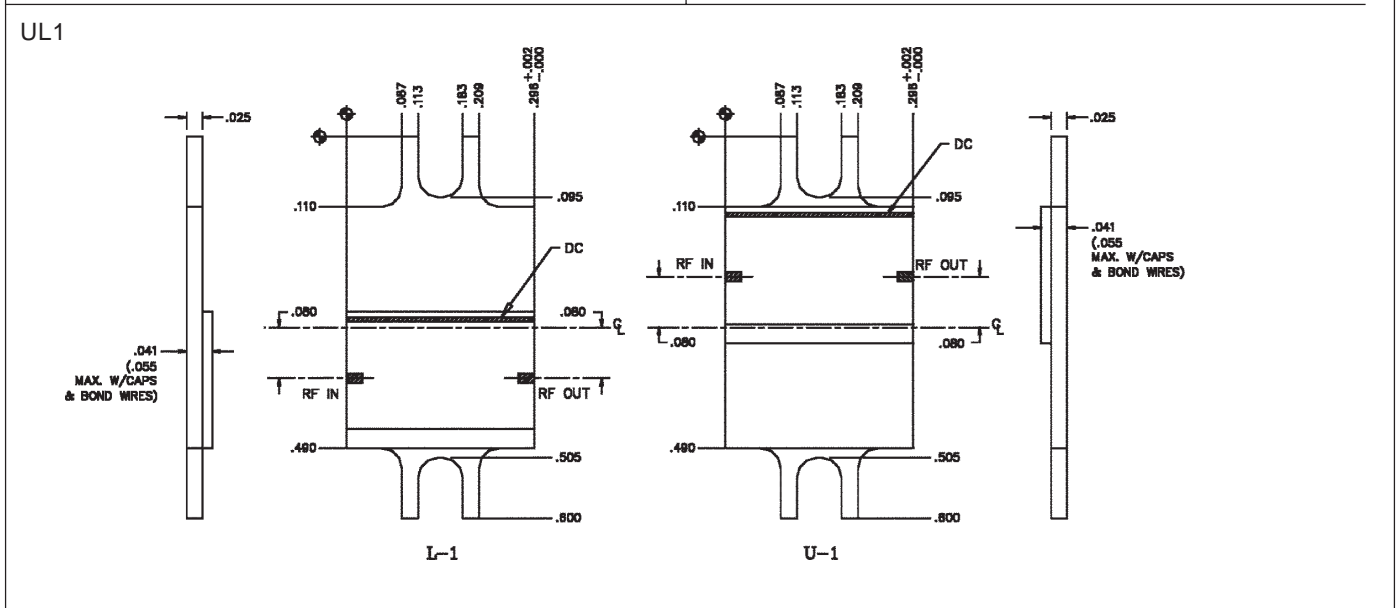
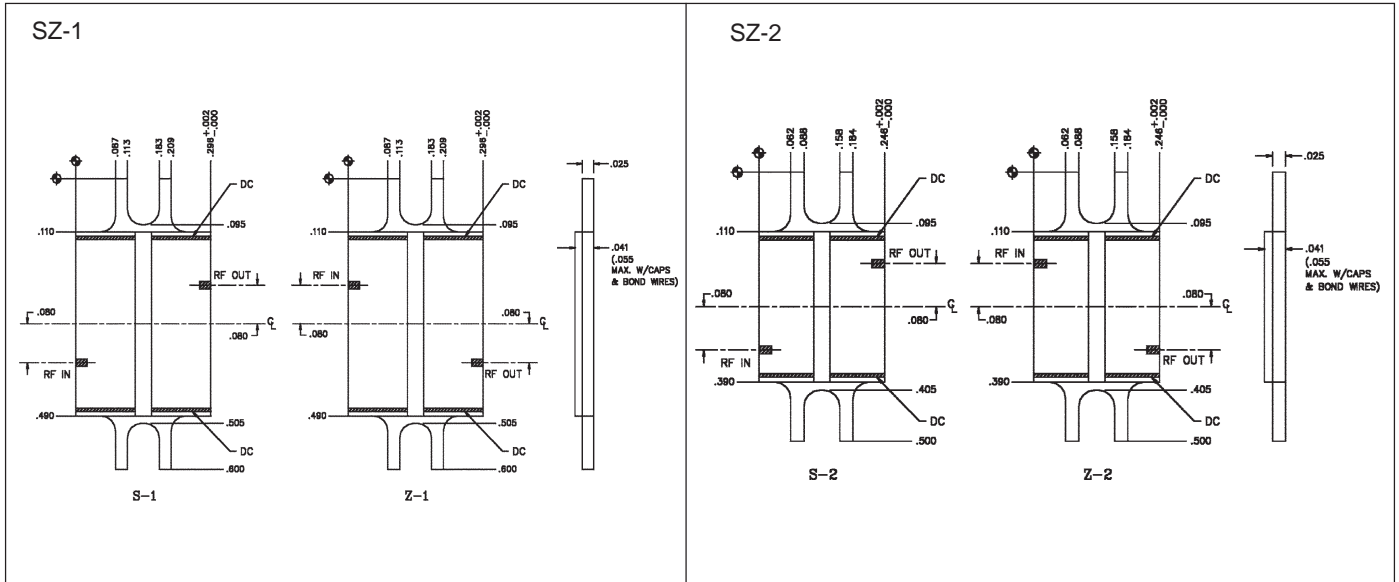






# Outline drawings

Dimensions in mm and inches (1 mm = 0.0394")



## **Contact Information**



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