

# Full Performance Amplifiers

T-74-09-01

## Available in 4 Pin TO-8 (TM), 4 Pin TO-8B (TR), Flatpacks, Surface Mount Packages and Connectorized Housings

(Listed by increasing Frequency, Noise Figure, and Power)

B-74-09-51

Model No.	Freq. Range (MHz)	Gain (dB)		Noise Figure (dB)		Power Output (dBm)		Third Order Intercept Point Typ (dBm)	VSWR MAX In/Out	Power Typ	
		Typ	Min	Typ	Max	Typ	Min			Vdc	mA
TR6476	10-450	29.0	28.0	2.7	3.5	+16.0	+11.0	+29	2.0:1	+8	65
TM6588	5-450	18.5	17.5	4.5	6.0	+21.0	+19.0	+35	2.0:1	+15	80
*TM6719	5-500	33.0	31.0	1.7	2.0	+9.5	+8.0	+19	2.0:1	+15	35
TM6143	5-500	15.8	15.0	1.6	2.5	+7.5	+5.0	+20	2.0:1	+15	14.5
TR7216	20-500	24.5	24.0	2.2	2.5	+19.5	+18.0	+33.5	2.0:1	+12	60
*TM6210	5-500	15.3	14.0	1.8	3.0	+7.5	+4.5	+18	2.0:1	+5	12
*TM5519	5-500	15.0	14.0	2.25	3.0	+14.5	+11.5	+29	2.0:1	+5	35
TM5119	5-500	15.5	14.0	2.3	3.0	+16.0	+14.0	+32	2.0:1	+15	30
TM6674	5-500	28.5	26.0	2.2	3.5	-1.0	-3.0	+9	2.0:1	+15	13.5
TM6573	5-500	32.0	29.0	2.5	3.5	+2.0	-2.5	+14	2.0:1	+15	20
TM6501	5-500	16.5	15.5	2.5	3.5	+3.0	+1.0	+15	2.0:1	+15	10
TM6675	10-500	20.5	19.0	2.7	3.5	+4.5	+2.0	+15	2.0:1	+15	15
TM6512	5-500	21.0	19.0	2.5	3.5	+10.0	+8.0	+21	2.0:1	+15	23
TM6575	5-500	21.0	19.0	2.4	3.5	+9.5	+8.5	+21	2.0:1	+15	23
TM6517	5-500	22.7	21.0	2.4	3.5	+9.5	+8.5	+21	2.0:1	+15	22
*TM5544	10-500	12.5	11.0	2.5	3.5	+14.0	+12.0	+28	2.0:1	+5	35
TM6544	10-500	12.0	10.5	2.0	3.5	+15.0	+13.0	+32	2.0:1	+15	35
TM6583	10-500	30.0	28.0	2.3	4.0	0.0	-4.0	+11	2.0:1	+5	13
*TM5101	5-500	13.0	12.0	2.75	4.0	+7.5	+6.0	+21	2.0:1	+15	20
TM6681	10-500	17.5	15.5	3.0	4.0	+9.5	+7.0	+23	2.0:1	+15	32
TM6524	5-500	30.5	28.5	3.0	4.0	+15.0	+14.0	+23	2.0:1	+15	65
TR6689	5-500	30.0	28.0	3.2	4.0	+21.5	+20.0	+34	2.0:1	+15	130
TR6676	10-500	40.5	37.5	3.0	4.3	+15.2	+13.1	+26	2.0:1	+15	77
TM6581	20-500	22.0	21.0	3.2	4.5	+16.0	+13.5	+28	2.0:1	+15	27
TM6674	5-500	28.5	26.0	2.2	3.5	-1.0	-3.0	+9	2.0:1	+15	13.5
*TM5133	10-500	10.0	9.0	3.3	4.5	+16.0	+14.5	+30	2.0:1	+15	57
*TM6582	30-500	23.0	21.0	3.5	4.5	+21.0	+17.0	+33	2.0:1	+15	47
TM6505	5-500	15.0	14.0	4.0	5.0	+10.0	+8.5	+23	2.0:1	+15	24
TM6533	5-500	16.5	15.0	3.5	5.0	+17.5	+16.5	+33	2.0:1	+15	50
TM6577	5-500	16.5	15.0	3.5	5.0	+17.5	+16.5	+33	2.0:1	+15	50
TR6589	5-500	26.5	25.0	3.8	5.0	+22.0	+20.0	+35	2.0:1	+15	130
TM6555	5-500	14.7	14.0	4.0	5.5	+11.5	+10.0	+25	2.0:1	+15	30
TM6572	5-500	14.7	13.5	4.0	5.5	+13.0	+11.0	+27	2.0:1	+5	30
TM6672	5-500	14.7	13.5	4.0	5.5	+13.0	+11.0	+27	2.0:1	+9	30
TM6147	5-500	17.0	16.0	3.5	5.5	+19.5	+17.5	+25	2.0:1	+15	50
TM6545	10-500	11.5	10.0	4.0	5.5	+19.0	+18.0	+36	2.0:1	+15	60
TM6574	5-500	30.0	27.0	4.8	6.0	+9.0	+7.0	+22	2.0:1	+15	37
TM6607	5-500	15.2	14.0	4.8	6.0	+15.0	+13.0	+27	2.0:1	+15	50
TR6776	1-520	30.0	26.0	4.1	6.0	+16.0	+13.5	+28	2.0:1	+15	65
TM6523	5-500	25.5	24.0	4.0	6.0	+16.0	+14.0	+30	2.0:1	+15	75
TM6576	5-500	28.0	26.0	5.0	6.0	+16.0	+14.0	+30	2.0:1	+15	64
*TM6509	5-500	14.5	13.0	4.6	6.0	+23.0	+20.0	+36	2.0:1	+15	88
TM6518	5-500	13.7	12.0	4.5	6.0	+25.0	+22.0	+35	2.0:1	+15	130
TM6557	10-500	15.0	13.5	4.5	6.5	+15.5	+14.0	+30	2.0:1	+15	44
TM6558	5-500	12.0	10.5	4.8	6.5	+19.0	+17.5	+36	2.0:1	+15	65
TM6131	5-500	10.3	9.0	4.5	6.5	+20.0	+18.0	+37	2.0:1	+15	62
TM6503	5-500	9.5	7.0	5.5	7.0	+15.0	+13.0	+33	2.0:1	+24	50
*TM6603	5-500	10.0	8.5	5.5	7.0	+15.5	+14.0	+30	2.0:1	+24	50
TM6559	5-500	11.5	10.0	5.5	7.0	+22.0	+20.0	+36	2.0:1	+15	88
TM6203	5-500	14.5	13.0	5.5	7.5	+25.0	+22.5	+36	2.0:1	+15	127
TM6507	10-500	15.5	14.0	6.0	8.0	+22.0	+20.0	+36	2.0:1	+15	110
*TM6605	10-600	15.7	13.5	3.0	4.5	+11.0	+7.0	+21	2.0:1	+15	24
TM9167	10-800	12.5	11.0	4.2	5.5	+15.5	+14.0	+29	2.0:1	+15	32
TM9118	10-800	14.7	13.5	4.4	5.5	+15.0	+14.5	+29	2.0:1	+15	45

\*New Product

# Outline Drawings

All unmarked Pins are internally grounded.

### T2 (TO-5 Package)

BASE IS GLASS.

PINS EQ SPACED ON 0.230 DIA BC LOCATED AS SHOWN

T-2									
Model No.	IN1	IN2	A	B	CON	V-Y	-Y	CTL	
TWR2213	2	6	3	5	N/A	N/A	N/A	N/A	
TWR2224	2	6	3	5	N/A	N/A	N/A	N/A	
TWR2224	2	6	N/A	N/A	6	3	5	4	

### T4 (TO-8 Package)

+DC VOLTAGE

### T5 (5 Pin TO-8 Package)

+DC VOLTAGE

### T7 (TO-12 Package)

+DC VOLTAGE

### T8 (TO8-B Package)

+DC VOLTAGE

### T10 (TO-39 Package)

OUTPUT and V...

### SM1 (Surface Mount Package)

### SM2 (Surface Mount Package)

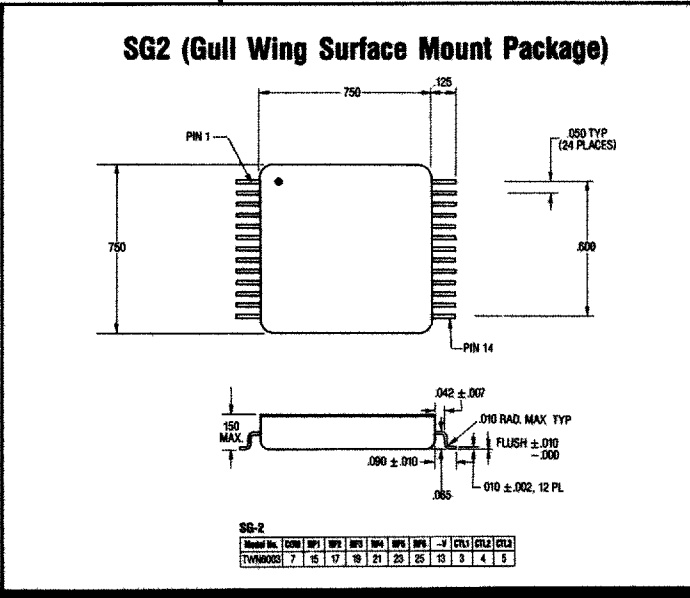
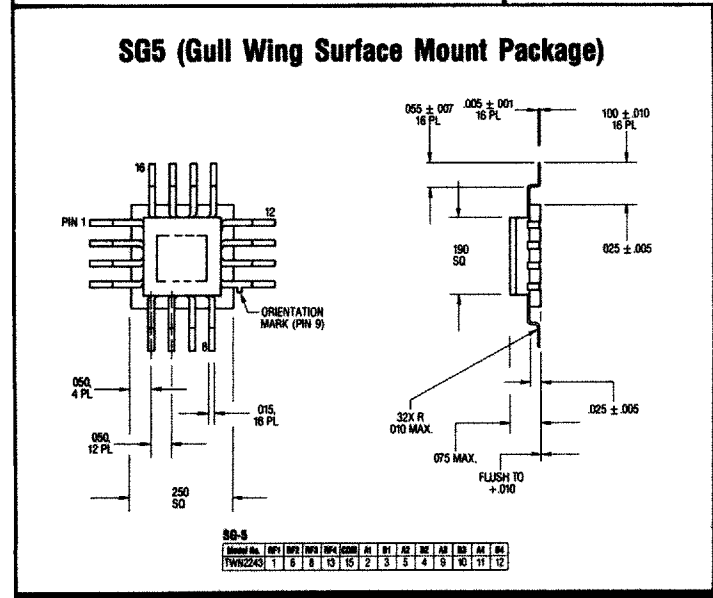
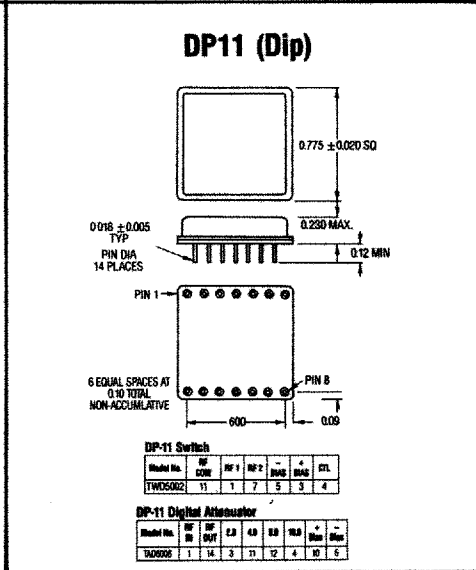
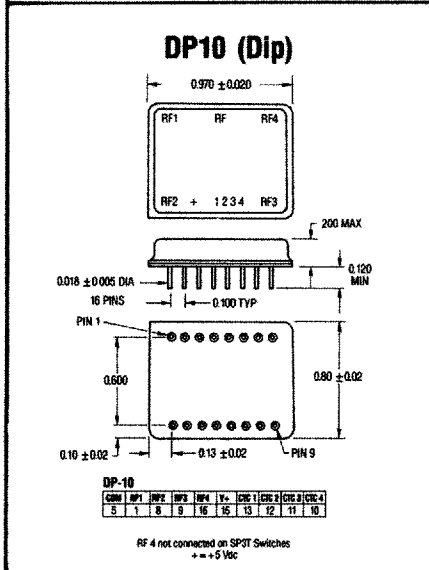
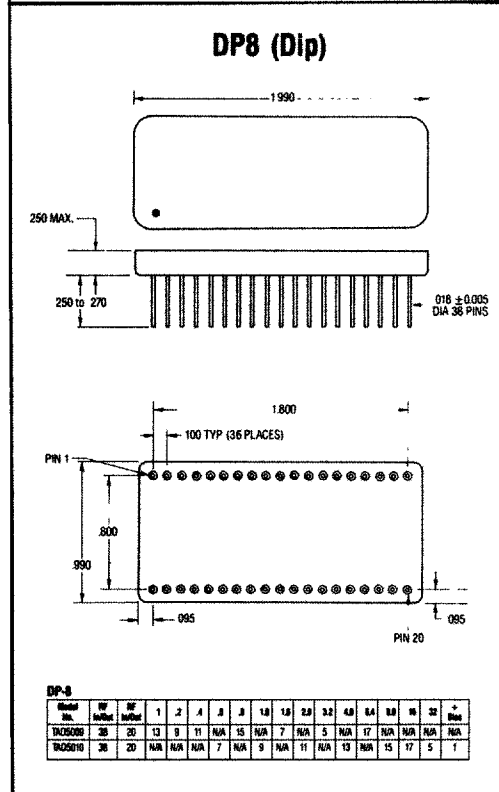
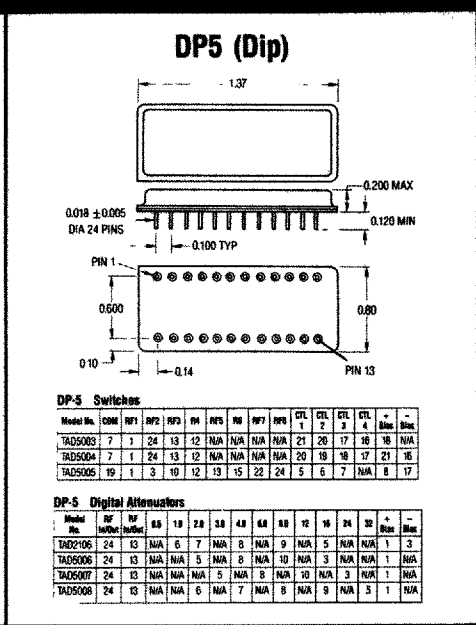
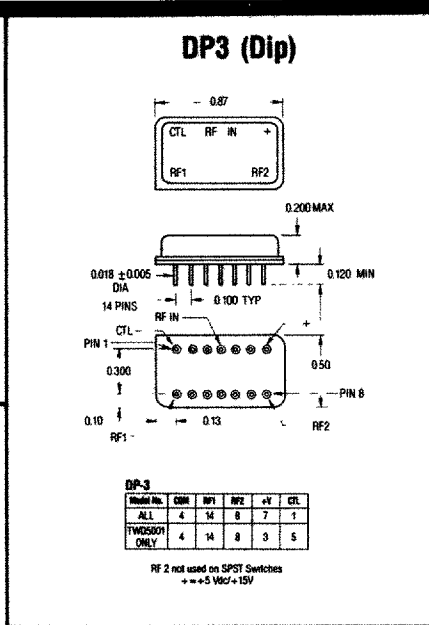
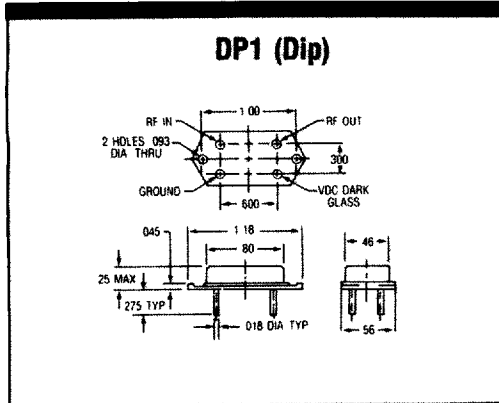
SM-2									
Model No.	IN	OUT	DC	A	B	CTL			
AB Amps	3	1	2	N/A	N/A	N/A			
TWR2278	3	1	N/A	4	2	N/A			
TWR9002	1	3	2	N/A	N/A	4			

### SM3 (Surface Mount Package)

### SM4 (Surface Mount Package)

# Outline Drawings

All unmarked Pins are internally grounded.



# Outline Drawings All unmarked Pins are internally grounded.

### FP2 (Flatpack)

50 OHM INPUT 50 OHM OUTPUT

### FP4 (Flatpack)

50 OHM INPUT 50 OHM OUTPUT

### FP7 (Flatpack)

ORIENTATION MARK

0.100 SQ. MAX 0.250 MIN

0.015 ±0.003 TYP

3 EQUAL SPACES @ 0.050 (1.27) TOLERANCE NON-CUMULATIVE

0.025 0.005 ±0.002

FP-7 PIN CONFIGURATION					
Model No.	RF COM	RF1	RF2	A	B
SPST	N/A	8	5	2	3
SPDT	1	3	6	4	5

### FP9 (Flatpack)

750 125 0.050 TYP 24 PLACES 0.600 150 MAX 0.065

### FP10 (Flatpack)

100, 8 PL NON-CUMULATIVE

115 1.130 ±0.015 0.900 500 MIN TYP 398 0.795 ±0.015 109 DIA THRU 2 PL 0.15 DIA, 10 PL 25 0.015 175 MAX

### FP11 (Flatpack)

PIN 8 51 0.020 0.13 DIA TYP 25 28 TYP PIN 1 0.082 51 205 MAX 0.080 TYP 110 0.080 TYP 160 140 TYP

FP-11			
Model No.	RF COM	RF1	RF2
SPDT	7	3	1

### FP12 (Flatpack)

0.375 ±0.020 0.015 DIA ±0.005 6 PLACES 0.375 ±0.020 0.312 MIN TYP 0.088 0.100 0.200 0.080 0.125 MAX

FP-12						
Model No.	RF1	RF2	COM	A	B	CTL
TWP2214	2	4	N/A	1	3	N/A
TWP2282	4	6	2	1	3	N/A
TWP2225	4	6	2	N/A	N/A	1

### FP13 (Flatpack)

6 EQUAL SPACES @ 0.100 TOLERANCE NON-CUMULATIVE

0.110 TYP PIN 1 0.325 MIN 0.490 0.820 ±0.005 PIN 14 0.145 MAX 0.070

RF 2 not connected on SPST + = +5 Vdc

### FP14 (Flatpack)

7 EQUAL SPACES @ 0.100 TOLERANCE NON-CUMULATIVE

0.150 TYP PIN 1 0.325 MIN 0.800 1.000 ±0.005 PIN 16 0.015 ±0.005 DIA 16 PLACES 0.070 0.145

RF 4 not connected on SPST + = +5 Vdc