

Full Performance Amplifiers

B-74-09-51

Flatpack Package

T-74-09-01

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
FP6146	5-500	21.0	20.5	5.0	5.5	+21	+20	+34	1.5:1	+15	130
FP9130	200-2000	23.5	22.0	5.0	6.5	+15	+13.5	+27	2.0:1	+15	90

Limiting Amplifiers

**Available in 4 Pin TO-8, Flatpacks,
Surface Mount Packages and Connectorized Housings**

Model No.	Freq. Range (MHz)	Gain (dB)		Output Level Saturated dBm	Noise Figure	Power Output 1 dB Comp pt. Min dBm	VSWR MAX	Power Typ	
		Typ	Min					Vdc	mA
TL9002	50-500	12.5	11.0	+15.0	9.0	+8.0	2.0:1	+15	54
TL9004	50-500	10.0	9.0	+13.5	9.0	+8.0	2.0:1	+12	50

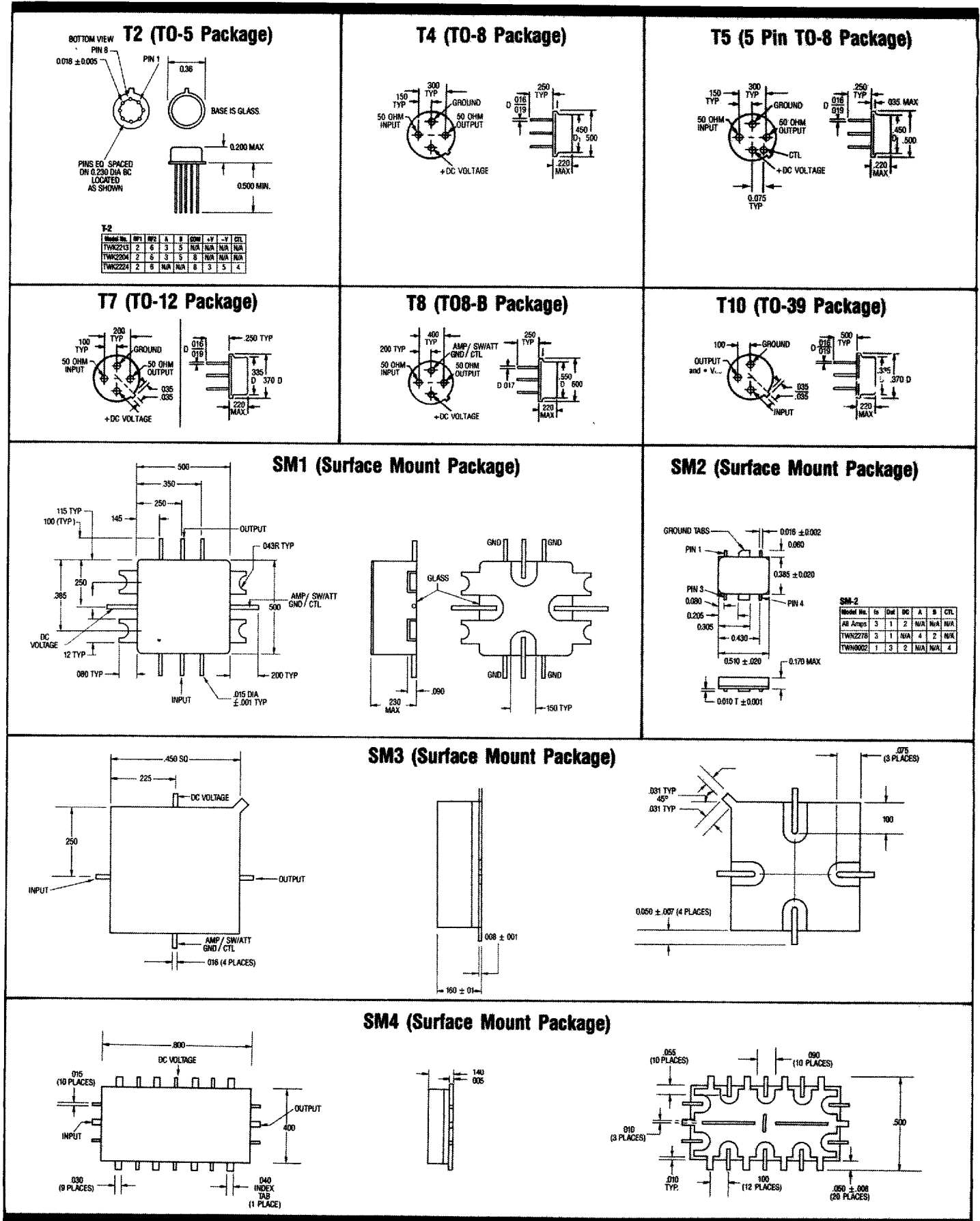
Multi Stage Amplifiers**4 Pin Dip Package**

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

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
DM4175	1-250	33.5	31.0	4.8	5.3	+10.5	+9.0	+25	2.0:1	+12	55
DM4178	1-250	21.0	20.0	6.0	7.0	+21.0	+20.0	+34	2.0:1	+15	120
DM4177	5-250	32.0	30.5	5.8	6.3	+9.0	+8.0	+21	2.0:1	+12	60
DM4179	5-250	21.0	20.0	6.0	7.0	+21.0	+20.0	+34	2.0:1	+15	120
DM4180	5-400	25.0	24.0	5.2	7.0	+22.0	+20.0	+30	2.0:1	+15	125
DM4150	5-500	25.0	24.0	2.3	2.7	+6.0	+5.0	+16	2.0:1	+12	40
DM4152	5-500	32.0	30.5	5.7	6.2	+9.0	+8.0	+21	2.0:1	+12	60

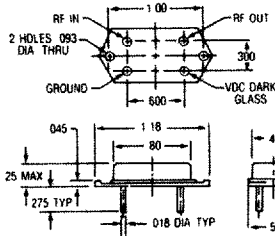
Outline Drawings

All unmarked Pins are internally grounded.

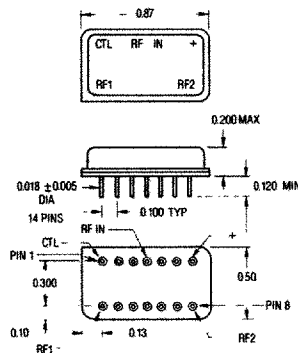


Outline Drawings *All unmarked Pins are internally grounded.*

DP1 (Dip)



DP3 (Dip)

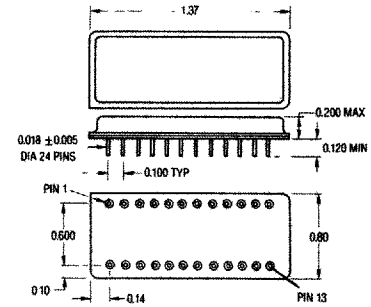


DP-3

Model No.	COM	RF1	RF2	+V	CTL
ALL	4	14	8	7	1
TW55001 ONLY	4	14	8	3	5

RF 2 not used on SPST Switches
+V = +5 Vdc ± 15V

DP5 (Dip)



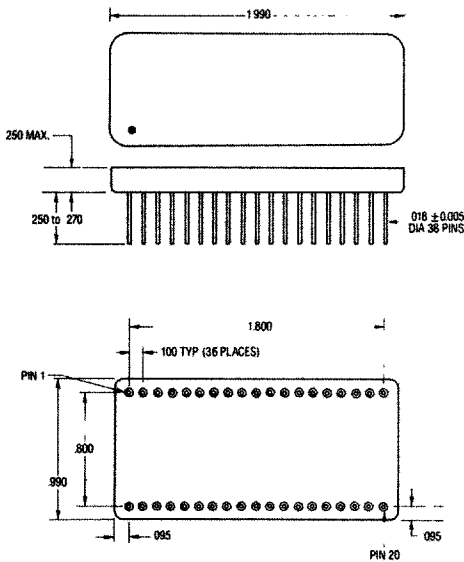
DP-5 Switches

Model No.	COM	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	CTL	CTL	CTL	+	-
TAD5003	7	1	24	13	12	N/A	N/A	N/A	N/A	21	20	17	16	N/A
TAD5004	7	1	24	13	12	N/A	N/A	N/A	N/A	20	18	17	21	16
TAD5005	19	1	3	10	12	13	15	22	24	5	6	7	N/A	8

DP-5 Digital Attenuators

Model No.	RF Input	RF Output	dB	1.8	2.8	3.8	4.8	5.8	6.8	7.8	8.8	9.8	10	14	24	34	44	54	64	74	84	94	104	114	124	134	144	154	164	174	184	194	204	214	224	234	244	254	264	274	284	294	304	314	324	334	344	354	364	374	384	394	404	414	424	434	444	454	464	474	484	494	504	514	524	534	544	554	564	574	584	594	604	614	624	634	644	654	664	674	684	694	704	714	724	734	744	754	764	774	784	794	804	814	824	834	844	854	864	874	884	894	904	914	924	934	944	954	964	974	984	994	1004	1014	1024	1034	1044	1054	1064	1074	1084	1094	1104	1114	1124	1134	1144	1154	1164	1174	1184	1194	1204	1214	1224	1234	1244	1254	1264	1274	1284	1294	1304	1314	1324	1334	1344	1354	1364	1374	1384	1394	1404	1414	1424	1434	1444	1454	1464	1474	1484	1494	1504	1514	1524	1534	1544	1554	1564	1574	1584	1594	1604	1614	1624	1634	1644	1654	1664	1674	1684	1694	1704	1714	1724	1734	1744	1754	1764	1774	1784	1794	1804	1814	1824	1834	1844	1854	1864	1874	1884	1894	1904	1914	1924	1934	1944	1954	1964	1974	1984	1994	2004	2014	2024	2034	2044	2054	2064	2074	2084	2094	2104	2114	2124	2134	2144	2154	2164	2174	2184	2194	2204	2214	2224	2234	2244	2254	2264	2274	2284	2294	2304	2314	2324	2334	2344	2354	2364	2374	2384	2394	2404	2414	2424	2434	2444	2454	2464	2474	2484	2494	2504	2514	2524	2534	2544	2554	2564	2574	2584	2594	2604	2614	2624	2634	2644	2654	2664	2674	2684	2694	2704	2714	2724	2734	2744	2754	2764	2774	2784	2794	2804	2814	2824	2834	2844	2854	2864	2874	2884	2894	2904	2914	2924	2934	2944	2954	2964	2974	2984	2994	3004	3014	3024	3034	3044	3054	3064	3074	3084	3094	3104	3114	3124	3134	3144	3154	3164	3174	3184	3194	3204	3214	3224	3234	3244	3254	3264	3274	3284	3294	3304	3314	3324	3334	3344	3354	3364	3374	3384	3394	3404	3414	3424	3434	3444	3454	3464	3474	3484	3494	3504	3514	3524	3534	3544	3554	3564	3574	3584	3594	3604	3614	3624	3634	3644	3654	3664	3674	3684	3694	3704	3714	3724	3734	3744	3754	3764	3774	3784	3794	3804	3814	3824	3834	3844	3854	3864	3874	3884	3894	3904	3914	3924	3934	3944	3954	3964	3974	3984	3994	4004	4014	4024	4034	4044	4054	4064	4074	4084	4094	4104	4114	4124	4134	4144	4154	4164	4174	4184	4194	4204	4214	4224	4234	4244	4254	4264	4274	4284	4294	4304	4314	4324	4334	4344	4354	4364	4374	4384	4394	4404	4414	4424	4434	4444	4454	4464	4474	4484	4494	4504	4514	4524	4534	4544	4554	4564	4574	4584	4594	4604	4614	4624	4634	4644	4654	4664	4674	4684	4694	4704	4714	4724	4734	4744	4754	4764	4774	4784	4794	4804	4814	4824	4834	4844	4854	4864	4874	4884	4894	4904	4914	4924	4934	4944	4954	4964	4974	4984	4994	5004	5014	5024	5034	5044	5054	5064	5074	5084	5094	5104	5114	5124	5134	5144	5154	5164	5174	5184	5194	5204	5214	5224	5234	5244	5254	5264	5274	5284	5294	5304	5314	5324	5334	5344	5354	5364	5374	5384	5394	5404	5414	5424	5434	5444	5454	5464	5474	5484	5494	5504	5514	5524	5534	5544	5554	5564	5574	5584	5594	5604	5614	5624	5634	5644	5654	5664	5674	5684	5694	5704	5714	5724	5734	5744	5754	5764	5774	5784	5794	5804	5814	5824	5834	5844	5854	5864	5874	5884	5894	5904	5914	5924	5934	5944	5954	5964	5974	5984	5994	6004	6014	6024	6034	6044	6054	6064	6074	6084	6094	6104	6114	6124	6134	6144	6154	6164	6174	6184	6194	6204	6214	6224	6234	6244	6254	6264	6274	6284	6294	6304	6314	6324	6334	6344	6354	6364	6374	6384	6394	6404	6414	6424	6434	6444	6454	6464	6474	6484	6494	6504	6514	6524	6534	6544	6554	6564	6574	6584	6594	6604	6614	6624	6634	6644	6654	6664	6674	6684	6694	6704	6714	6724	6734	6744	6754	6764	6774	6784	6794	6804	6814	6824	6834	6844	6854	6864	6874	6884	6894	6904	6914	6924	6934	6944	6954	6964	6974	6984	6994	7004	7014	7024	7034	7044	7054	7064	7074	7084	7094	7104	7114	7124	7134	7144	7154	7164	7174	7184	7194	7204	7214	7224	7234	7244	7254	7264	7274	7284	7294	7304	7314	7324	7334	7344	7354	7364	7374	7384	7394	7404	7414	7424	7434	7444	7454	7464	7474	7484	7494	7504	7514	7524	7534	7544	7554	7564	7574	7584	7594	7604	7614	7624	7634	7644	7654	7664	7674	7684	7694	7704	7714	7724	7734	7744	7754	7764	7774	7784	7794	7804	7814	7824	7834	7844	7854	7864	7874	7884	7894	7904	7914	7924	7934	7944	7954	7964	7974	7984	7994	8004	8014	8024	8034	8044	8054	8064	8074	8084	8094	8104	8114	8124	8134	8144	8154	8164	8174	8184	8194	8204	8214	8224	8234	8244	8254	8264	8274	8284	8294	8304	8314	8324	8334	8344	8354	8364	8374	8384	8394	8404	8414	8424	8434	8444	8454	8464	8474	8484	8494	8504	8514	8524	8534	8544	8554	8564	8574	8584	8594	8604	8614	8624	8634	8644	8654	8664	8674	8684	8694	8704	8714	8724	8734	8744	8754	8764	8774	8784	8794	8804	8814	8824	8834	8844	8854	8864	8874	8884	8894	8904	8914	8924	8934	8944	8954	8964	8974	8984	8994	9004	9014	9024	9034	9044	9054	9064	9074	9084	9094	9104	9114	9124	9134	9144	9154	9164	9174	9184	9194	9204	9214	9224	9234	9244	9254	9264	9274	9284	9294	9304	9314	9324	9334	9344	9354	9364	9374	9384	9394	9404	9414	9424	9434	9444	9454	9464	9474	9484	9494	9504	9514	9524	9534	9544	9554	9564	9574	9584	9594	9604	9614	9624	9634	9644	9654	9664	9674	9684	9694	9704	9714	9724	9734	9744	9754	9764	9774	9784	9794	9804	9814	9824	9834	9844	9854	9864	9874	9884	9894	9904	9914	9924	9934	9944	9954	9964	9974	9984	9994	10004
TAD2106	24	13	N/A	6	7	N/A	8	N/A	9	N/A	5	N/A	N/A	N/A	N/A	1	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

DP8 (Dip)



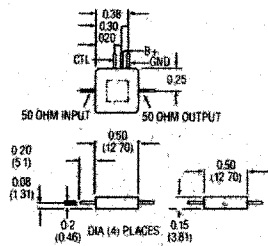
DP-8

Model No.	RF Input	RF Output	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97
-----------	----------	-----------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

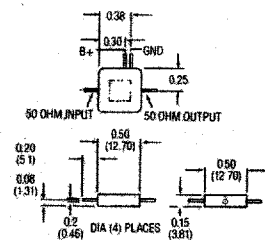
Outline Drawings

All unmarked Pins are internally grounded.

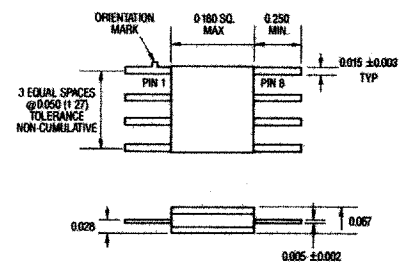
FP2 (Flatpack)



FP4 (Flatpack)



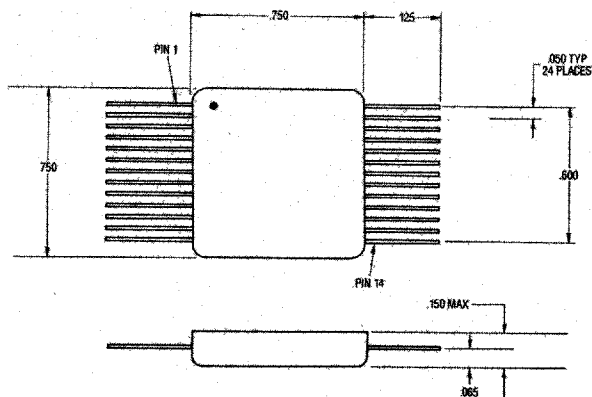
FP7 (Flatpack)



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

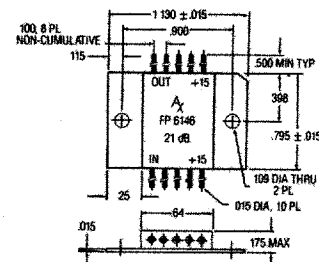
FP9 (Flatpack)



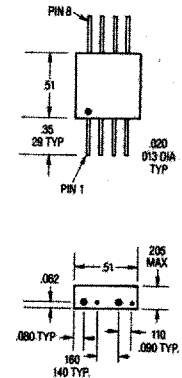
FP-9

Model No.	COM	RF1	RF2	RF3	RF4	RF5	RF6	RF7	-V	CTL	CTL
TWP6004	7	14	16	18	20	22	24	26	13	3	4

FP10 (Flatpack)



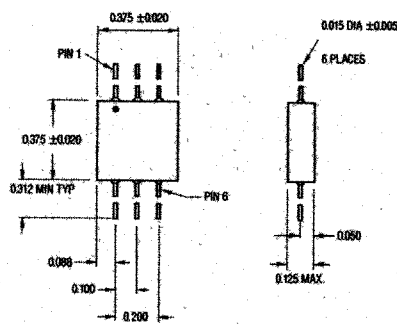
FP11 (Flatpack)



FP-11

Def	V _{max}	V ₊
V _{00H}	7	3

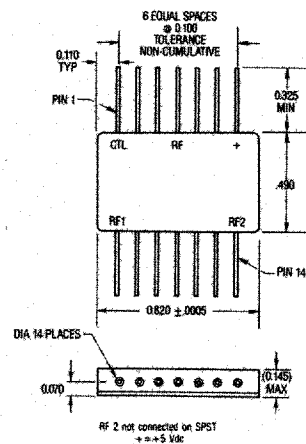
FP12 (Flatpack)



FP-12

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

FP13 (Flatpack)



FP14 (Flatpack)

