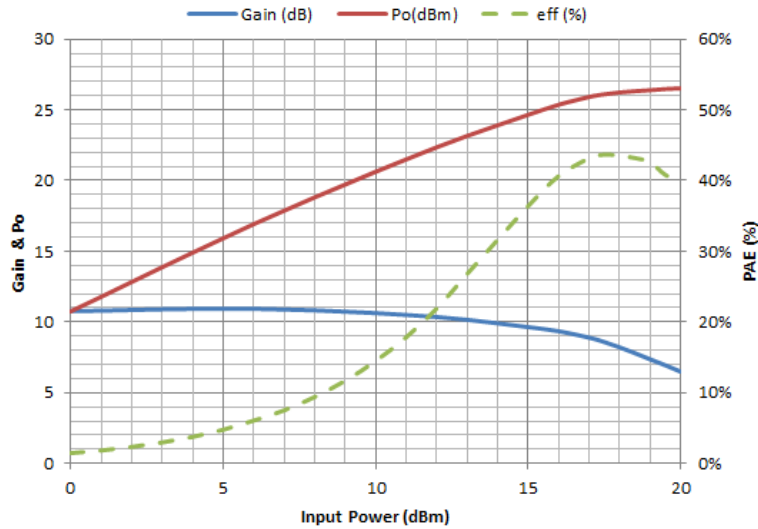
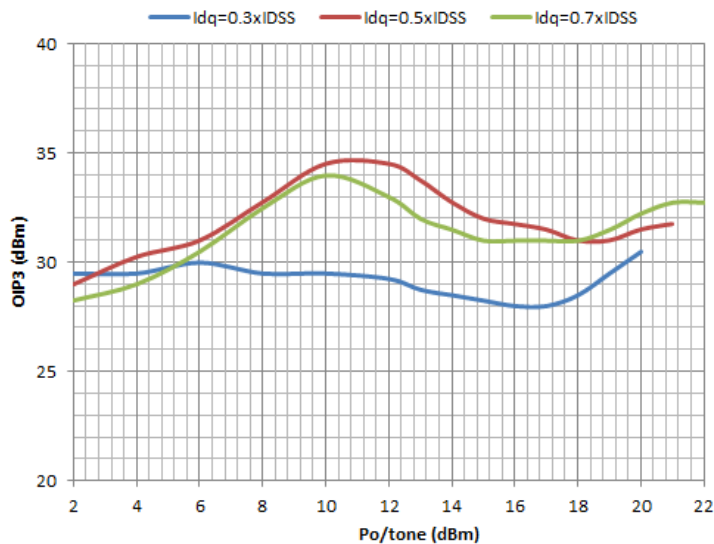




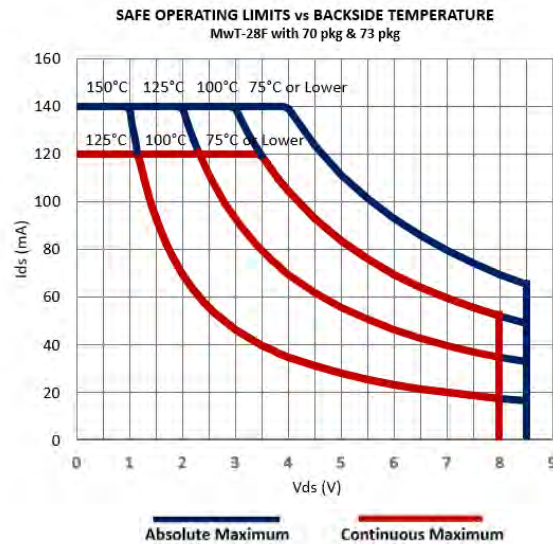
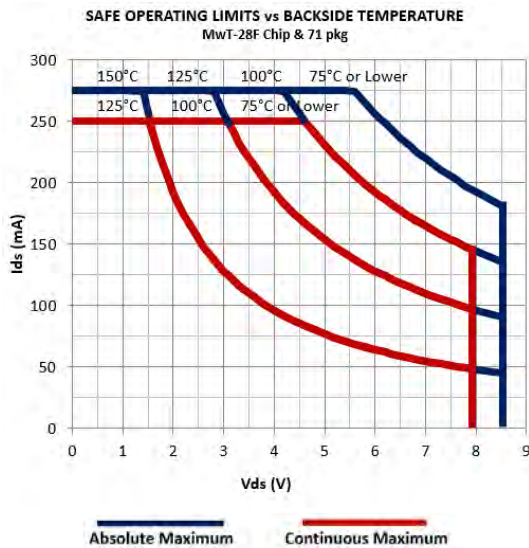
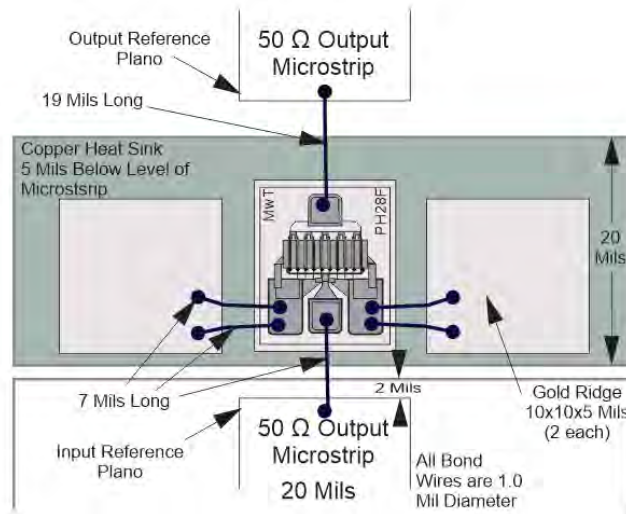
**MwT-PH28F, Po, Gain & PAE vs Pin at 18GHz**  
**Vds=8V; Idq=98mA**



**MwT-PH28F, OIP3 at different Idq vs Po/tone at 18GHz**



## MwT-PH28F DUAL BIAS



### Absolute Maximum Rating

Symbol	Parameter	Units	Cont Max1	Absolute Max2
VDS	Drain to Source Volt.	V	8.0	8.5
Tch	Channel Temperature	°C	+150	+175
Tst	Storage Temperature	°C	-65 to +150	+175
Pin	RF Input Power	mW	200	250

**Notes:**

1. Exceeding any one of these limits in continuous operation may reduce the mean-time-to-failure below the design goal.
2. Exceeding any one of these limits may cause permanent damage.

## S-Parameters

S-PARAMETER Vds=8V, Ids= 0.7 x Idss										
Freq.	S11		S21		S12		S22		K	GMAX
GHz	dB	Ang (°)	dB	Ang (°)	dB	Ang (°)	dB	Ang (°)		dB
1	-0.450	-51.515	22.010	148.214	-33.520	63.244	-3.615	-16.389	0.136	27.765
2	-1.024	-89.239	19.950	125.819	-29.836	47.362	-4.817	-26.114	0.218	24.893
3	-1.418	-114.385	17.842	110.140	-28.378	37.558	-5.724	-31.841	0.313	23.110
4	-1.588	-131.771	16.031	98.414	-27.708	31.247	-6.324	-36.013	0.395	21.870
5	-1.788	-144.388	14.288	89.554	-27.654	28.283	-6.885	-40.072	0.535	20.971
6	-1.858	-153.655	13.035	82.249	-27.395	26.949	-7.043	-42.728	0.616	20.215
7	-1.928	-162.475	11.893	74.727	-27.241	26.751	-7.306	-46.366	0.716	19.567
8	-1.815	-168.238	10.823	68.326	-27.098	25.862	-7.342	-51.966	0.740	18.960
9	-1.875	-174.296	9.709	61.903	-27.195	27.940	-7.737	-57.413	0.899	18.452
10	-1.809	-179.740	8.890	56.077	-27.054	26.924	-7.440	-62.126	0.910	17.972
11	-1.692	-174.355	8.148	50.279	-27.033	29.872	-7.607	-67.298	0.924	17.591
12	-1.667	-170.486	7.377	44.810	-26.963	30.813	-7.532	-72.995	0.982	17.170
13	-1.688	-166.484	6.676	39.443	-26.759	32.719	-7.440	-78.775	1.045	15.418
14	-1.702	-163.288	5.873	34.762	-26.636	36.055	-7.320	-85.250	1.136	14.011
15	-1.537	-158.547	5.324	29.694	-26.385	39.146	-7.155	-90.335	1.036	14.689
16	-1.514	-156.470	4.825	24.059	-25.858	41.519	-7.049	-97.246	1.004	14.963
17	-1.550	-153.769	4.249	19.326	-25.384	42.848	-6.830	-104.371	1.028	13.800
18	-1.498	-151.117	3.639	15.499	-24.753	44.950	-6.618	-111.286	0.974	14.196
19	-1.402	-149.425	3.018	10.789	-24.188	46.869	-6.384	-116.310	0.888	13.603
20	-1.346	-144.763	2.615	5.676	-23.693	48.327	-6.153	-122.405	0.828	13.154
21	-1.258	-141.492	1.771	-1.041	-22.844	49.556	-5.656	-128.695	0.714	12.308
22	-1.274	-139.622	1.343	-5.069	-22.350	49.467	-5.386	-134.713	0.701	11.847
23	-1.140	-137.883	0.851	-8.868	-21.711	49.009	-5.248	-140.698	0.589	11.281
24	-1.180	-134.880	0.138	-13.915	-21.427	47.605	-5.106	-146.692	0.658	10.783
25	-1.178	-133.122	-0.336	-18.830	-20.542	47.550	-4.539	-153.398	0.557	10.103
26	-1.105	-131.151	-0.865	-23.013	-20.136	45.602	-4.164	-158.849	0.473	9.636
27	-1.054	-128.924	-1.340	-27.559	-19.377	45.555	-3.794	-164.556	0.388	9.019
28	-0.950	-127.808	-1.958	-30.936	-18.974	42.844	-3.581	-169.396	0.306	8.508
29	-0.949	-124.402	-2.616	-35.248	-18.545	41.863	-3.309	-174.330	0.304	7.965
30	-0.954	-122.693	-3.246	-39.254	-18.035	40.306	-3.031	-178.538	0.272	7.394

### ORDERING INFORMATION:

When placing order or inquiring, please specify wafer number, if known. For details of Safe Handling Procedure please see supplementary information in available PDF on our website [www.mwtinc.com](http://www.mwtinc.com). For package information, please see supplementary application note in PDF format by clicking located on our website.

### Available Packaging:

- 70 Package - MwT-PH28F70
- 71 Package - MwT-PH28F71
- 73 Package - MwT-PH28F73