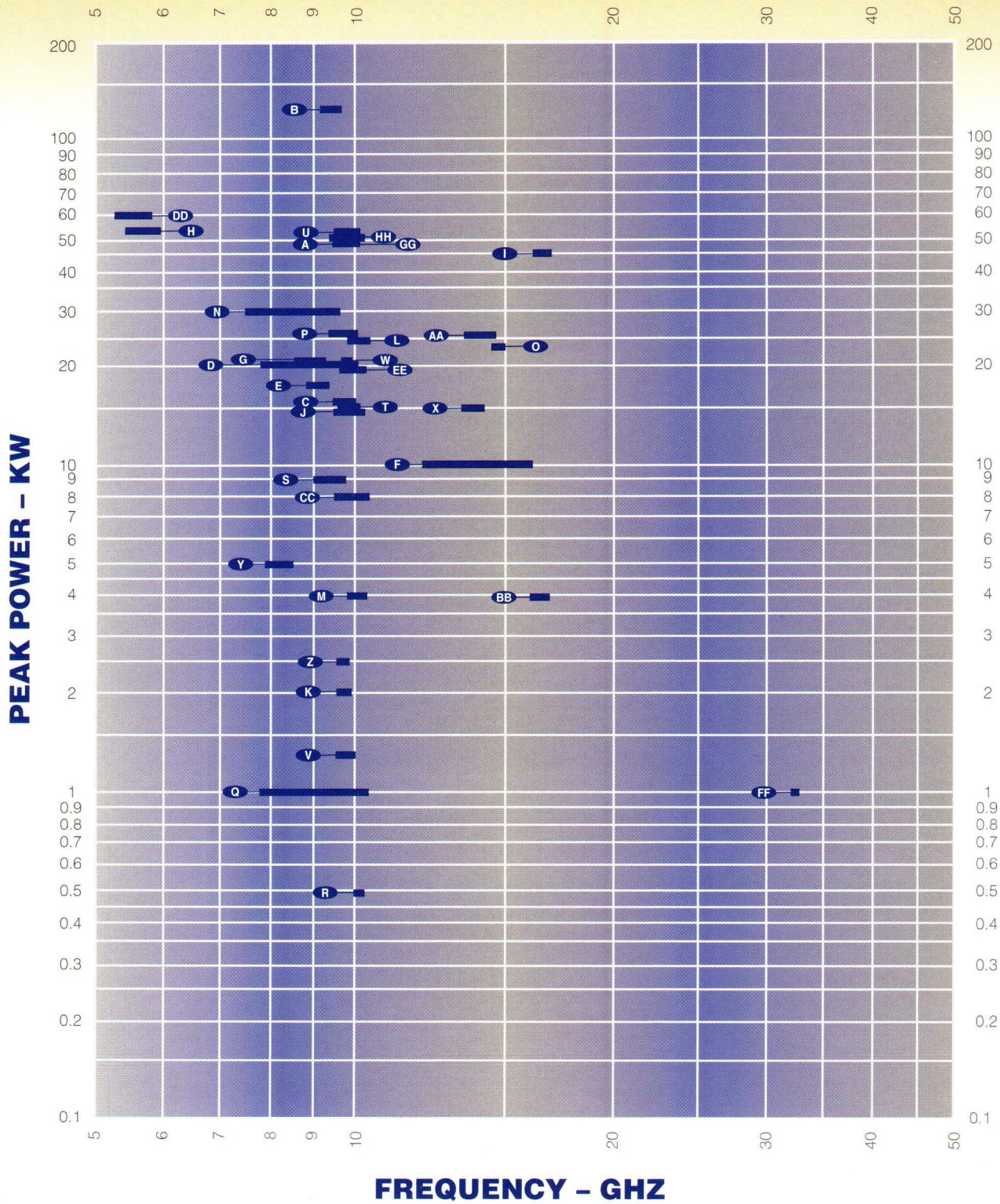


Litton Coupled Cavity Traveling Wave Tubes

Peak Power vs Frequency



Litton Coupled Cavity TWTs

Data			Tube Type	Beam Control	Cathode Voltage KV	Peak Current A	Frequency Range GHZ	Maximum Bandwidth %	Minimum Peak Power KW	Average Power Watts	Maximum Duty %	Saturation Gain DB	# of Collector Supplies	Focusing	Cooling	Weight Lbs
Item	Sheet	Diskette														
A	Y	Y	L5256-01	K	-32.5	8.4	9.45-10.05	6.3	50	100	0.2	47	0	P	C	13
B	Y	Y	L5391-57	G	-44.5	14	9.1-9.6	5.5	125	500	0.4	45	1	P	L	24
C	Y	Y	L5519-55	G	-23.3	4.4	9.5-10	5.3	15	225	1.5	56	1	P	A	11
D	Y	Y	L5629-50	G	-33.3	6.8	7.8-10	28.2	20	400	2	40	1	P	L	35
E	Y	Y	L5630-50	G	-24.5	4.7	8.8-9.3	5.7	17.5	280	1.6	51	1	P	A	15
F	Y	Y	L5633-50	G	-32.1	3.7	12-16	33.3	10	200	2	39	1	P	L	22
G	Y	Y	L5634-50	G	-25.9	7	8.5-9.5	11.8	20	200	1	46	0	P	A	17
H	N	Y	L5648-01	K	-33.5	9.6	5.4-5.9	9.3	53	1590	3	52	0	P	L	40
I	Y	Y	L5649-02	K	-37.1	6.2	16.1-16.9	5	45	59	0.13	54	0	P	C	9
J	Y	Y	L5650-50 HI	G	-26	3.2	9.5-10.1	6.3	15	750	5	47	3	P	L	24
K	Y	Y	L5650-50 LO	G	-26	0.8	9.5-9.9	4.2	2	1000	50	25	3	P	L	24
L	Y	Y	L5652-50 HI	G	-35	6.0	9.85-10.3	4.6	25	750	3	59	3	P	L	29
M	Y	Y	L5652-50 LO	G	-35	1.4	9.9-10.25	3.5	4	960	24	29	3	P	L	29
N	N	Y	L5653-50	G	-34	6.8	7.8-9.6	23	30	600	2	44	1	P	L	35
O	Y	Y	L5748-50	G	-34	3.8	14.4-15	4.2	23	690	3	40	1	P	L	25
P	Y	Y	L5755-50	G	-26	5.7	9.4-10	6.4	25	375	1.5	50	1	P	A	17
Q	N	Y	L5804-00	M	-9.75	1.2	7.8-10.3	32	1	1000	100	33	1	S	L	50
R	Y	Y	L5805-01	K	-16	0.26	10-10.2	2	0.5	500	100	40	0	P	L	8
S	Y	Y	L5806-50	G	-18.1	2.5	9-9.8	8.9	9	4500	50	53	1	W	L	50
T	Y	Y	L5810-50	G	-23.5	4	9.55-9.90	3.7	15	525	3.5	57	1	P	L	16
U	N	Y	L5830-50	G	-33.2	7.7	9.4-10.05	6.3	50	500	1	53	1	P	L	14
V	Y	Y	L5831-50	G	-11.2	0.75	9.6-10	4.2	1.3	650	50	55	1	P	L	13
W	N	Y	L5844-50	G	-23.3	4.3	9.69-9.91	2.3	20	300	1.5	58	1	P	A	11
X	Y	Y	L5849-50	G	-32.5	2.4	13.4-14	4.5	15	750	5	49	2	P	L	19
Y	N	Y	L5852-00	K	-13.8	2.1	7.9-8.4	6.3	5	5000	100	35	0	W	L	75
Z	N	Y	L5858-50	G	-12.1	1.3	9.6-9.8	2.1	3	1500	50	50	1	W	L	37
AA	N	Y	L5867-50	G	-37.6	4.1	13.4-14.4	7.5	25	1250	5	50	1	P	L	22
BB	Y	Y	L5869-50	G	-25.7	0.98	16.25-16.75	3.1	4	1200	30	50	3	P	L	16
CC	N	Y	L5870-51	G	-18.2	2.4	9.5-10.3	8.4	8	640	8	46	2	P	L	16
DD	N	Y	L5878-50	G	-36.5	11.0	5.25-5.75	9.5	60	2100	3.5	50	1	P	L	70
EE	Y	Y	L5901-50	G	-23	4.1	9.6-10.2	6.3	20	1200	6	57	2	P	L	17
FF	N	Y	L5902	G	-19.7	0.67	33.7-34	0.9	1	300	30	40	1	P	A	6
GG	N	N	L5906-50	G	-33.4	7.1	9.45-10.05	0.9	50	500	1	54	2	P	A	18
HH	N	N	L6000-50	G	-36	7.4	9.3-10.1	0.9	50	900	1.8	53	1	P	L	14

Use this chart to estimate cooling and focusing requirements for new applications. Note that "Overcooled" means that the cooling method selected for the Litton CCTWT exceeds the requirements of the power/duty combination.

Beam Control:

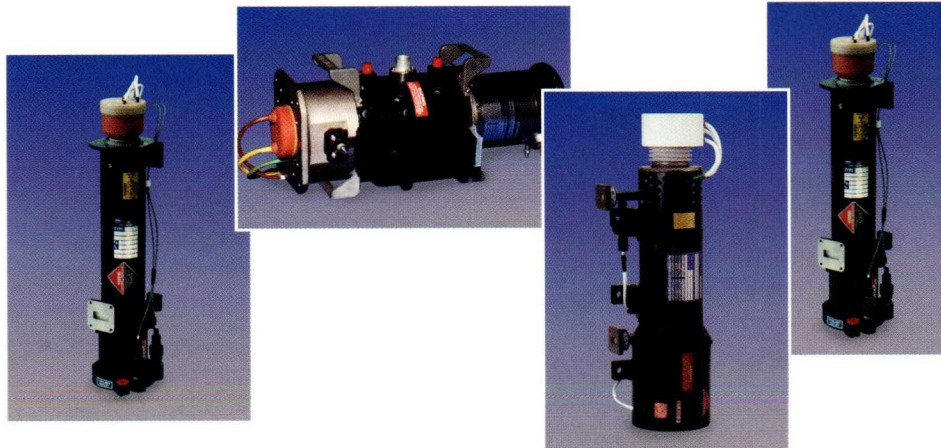
G=Grid Pulse
K=Cathode Pulse
M=Mod Anode

Cooling:

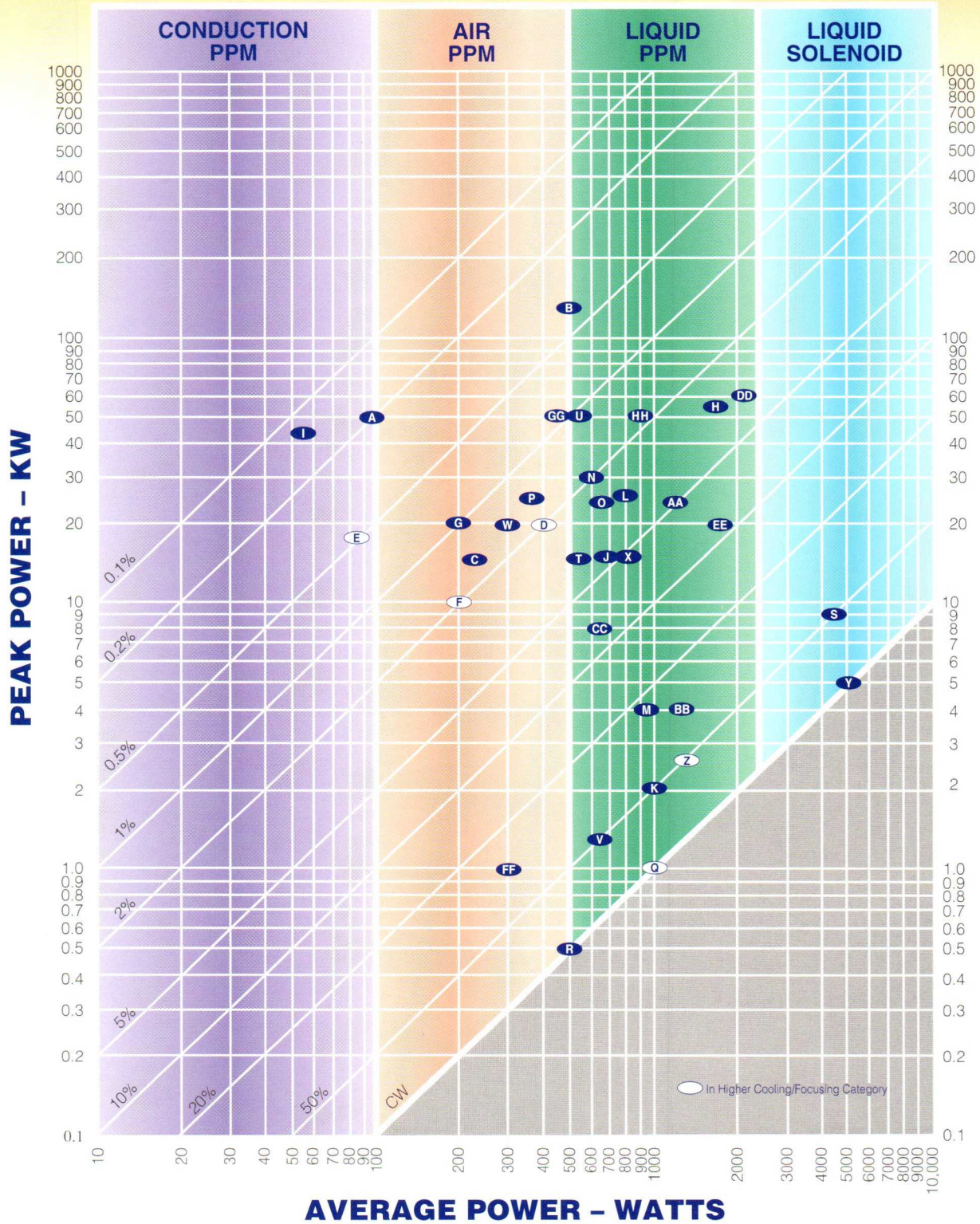
A=Forced Air
C=Conduction
L=Liquid Cooled

Focusing:

P=PPM
S=Plug-in Solenoid
W=Wrapped Solenoid



Cooling and Focusing



Litton Electron Devices Coupled Cavity Traveling Wave Tubes (CCTWTs) are ideally suited for radar and ECM systems requiring high power, wide bandwidth and amplification up to 200 kilowatts of peak microwave power. Available in pulsed or continuous wave these CCTWTs are currently used in radar systems for airport surveillance, aircraft weapons control and air-to-ground mapping and tracking.

Litton's engineers custom tailor designs to the customer's exact specifications and needs. They are available with grid, anode or cathode modulation, liquid, air or conduction cooling, single or dual mode. Output power levels range from 0.5kW to 125kW minimum peak power and 59 to 5000 watts average power. The tubes operate over bandwidths from 0.9% to 37.3% and frequencies up to 34GHz.

Litton's CCTWT circuit designs provide high RF efficiencies in excess of 30% when combined with depressed collector technology. Litton has also developed unique designs for the electron gun which provide for extremely fast warm-up, and stable operation in less than five seconds.

Litton Electron Devices is a MIL-Q-9858 and MIL-STD-2000 qualified facility. By using high yield, efficient manufacturing techniques, we are able to offer high reliability at a low cost providing the best value MIL-SPEC CCTWTs in the industry.

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