

CAPABILITY MEC manufactures a broad line of metal ceramic traveling wave tubes, backward wave oscillators, and solid state delay devices—many with compatible power supplies. This capability enables a designer to select from a range of devices which operate from UHF through K_a bands in frequency—and from low noise, low power through the 100 watt CW level and 1 kilowatt pulsed power. All MEC products offer high reliability, long life and reproducibility based upon conservative engineering and precision manufacturing techniques.



Tube Type	Band	Freq. Range (GHz)	Min. Po (dbm)	Min. SSG (qp)	Max. NF (db)
M 5351	P	0.5-1.0	10.0	30	20
M 5352	L	1.0-2.0	10.0	30	15
M 5367	L	1.0-2.0	13.0	30	20
M 5387	L	1.0-2.0	10.0	30	20
M 5341	S	2.0-4.0	10.0	30	20
M 5353	S	2.0-4.0	10.0	30	15
M 5368	S	2.0-4.0	13.0	30	20
M 5362	S	2.3-4.45	10.0	30	15
M 5371	S	2.3-4.45	13.0	30	20
M 5389	C	4.0-8.0	10.0	30	20
M 5354	C	4.0-8.0	10.0	30	15
M 5369	C	4.0-8.0	13.0	30	20
M 5391	X	7.0-12.4	10.0	30	20
M 5390	X	7.0-11.0	10.0	30	20
M 5355	X	7.0-11.0	10.0	30	15
M 5370	X	7.0-11.0	13.0	30	20

LOW POWER TWTs

Tube Type	Band	Freq. Range (GHz)	Max. NF (db)	Min. SSG (db)	Min. Po (dbm)
M 5356	L	1.0- 2.6	12	30	7
M 2102G	L	1.0- 2.6	13	25	7
M 2102F2	L	1.0- 2.0	11	25	7
M 5357	S	2.0- 4.0	10	30	10
M 5388	S	2.0- 4.0	10	30	10
M 5397	S	2.0- 4.0	12	30	10
M 5363	S	2.3-4.45	10	30	10
M 5358	C	4.0- 8.0	10	30	10
M 5399	X	7.0-11.0	10	30	10
M 5359	X	7.0-11.0	11	30	10
M 5361	X	7.0-12.4	12	30	10
M 5360	X	8.0-12.4	12	30	10
M 2114I	Ku	11.8-18.2	17	30	7
M 5364	Ku	12.0-18.0	12.5	25	5
M 5318	Ku	12.0-18.0	14	25	3
M 5365	K	18.0-26.0	13	25	5
M 5366	Ka	26.0-40.0	16	25	3

LOW NOISE TWTs

Tube Type	Band	Freq. Range (GHz)	Min. Po (watts)	Min. SSG (db)	Max. NF (db)
M 4268	L	1.0-2.0	1	30	30
M 5375	L	1.0-2.0	2	30	30
M 4260	S	2.0-4.0	1	30	30
M 5376	S	2.0-4.0	2	30	30
M 5379	S	2.5-4.0	2	41 (max)	N. A.
M 4278	C	4.0-8.0	1	30	30
M 5377	C	4.0-8.0	2	30	30
M 4273	X	7.0-12.4	1	30	30
M 5378	X	8.0-11.0	2	41 (max)	N. A.
M 5046	Ku	12.4-18.0	3	30	35

MEDIUM POWER TWTs

HIPOLON TWTs

Tube Type	Band	Freq. Range (GHz)	Max. NF (db)	Min. SSG (db)	Min. Po (dbm)
M 5380	S	2.0- 4.0	15	30	27
M 5328	X	7.0-11.0	27	43	33
M 5398	X	7.0-11.0	22	43	33

MINIATURE TWTs

Tube Type	Band	Freq. Range (GHz)	Max. NF (db)	Min. SSG (db)	Min. Po (dbm)	RF Connector (Type)
M 5388	S	2.0-4.0	10	30	10	OSM
M 5397	S	2.0-4.0	12	30	10	OSM
M 5383	S	2.0-4.0	25	10	10	OSM
M 5384	C	4.0-8.0	27	10	10	OSM
M 5364	Ku	12.0-18.0	12.5	25	5	WG
M 5365	K	18.0-26.0	13	25	5	WG
M 5366	Ka	26.0-40.0	16	25	3	WG

GUARANTEE MEC offers one of the most liberal service guarantees in the industry. This policy is continually being updated and improved, as the performance history on a given type of device is accrued.

HIGH POWER TWTs

Type	Band	Freq. Range (GHz)	Peak Power Output	Maximum Duty	Saturation Gain (db)	Grid	Focusing	Cooling	Remarks
M 4383A	P	0.5-1.0	1 kw	1%	30	Yes	PPM	Air 10 cfm at sea level	Operates to MIL-E-5400 Class II with standard vane-axial fan
M 4446	L	1-2	100 w	CW	30	No	PPM	Air 60 cfm at sea level	Tentative
M 5311		1-2	100 w	CW	30	No	PPM	Keep heat sink below 100°C	Tentative
M 4447	S	2-4	100 w	CW	30	No	PPM	Air 60 cfm at sea level	Meets full MIL-E-5400 Class II environment
M 5312		2-4	100 w	CW	30	No	PPM	Keep heat sink below 100°C	
M 4448	C	4-8	100 w	CW	30	No	PPM	Air 60 cfm at sea level	Tentative
M 5348		4-8	100 w	CW	30	No	PPM	Air 60 cfm at sea level	Meets full MIL-E-5400 Class II environment
M 5313		4-8	100 w	CW	30	No	PPM	Keep heat sink below 100°C	
M 5349	C-X	5-11	10 w	CW	30	No	PPM	Heat sink	Tentative MIL-E-5400 Class II
M 5350		5-11	20 w	CW	30	No	PPM	Heat sink	
M 5333	X	10.5-12.5	35 w	CW	40	No	PPM	Heat sink	MIL-E-5400 Class II
M 4369		7-11	100 w	CW	30	No	PPM	Air 60 cfm at sea level	Meets full MIL-E-5400 Class II environment Weight includes solenoid, 125 lbs.
M 5314		7-11	100 w	CW	30	No	PPM	Keep heat sink below 100°C	
M 4444		7.7-8.4	12.5 kw	CW	34	No	Solenoid	Water 10 gpm at 100 psi	