TELEDYNE MEC
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MODEL NO. MEC 5208

2.0 to 8.0 GHz

TYPICAL OPERATING CONDITIONS				POWER SUPPLY REQUIREMENTS		
ELEMENT		VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX
HEATER		-6.3 Vdc	1.85 A	-6.0 Vdc	-6.5 Vdc	2.5 A
HELIX	W/RF	GROUND	40 mA	GROUND		55 mA
	W/O RF		5 mA			
GRID ON		125 Vdc	0.2 mA	90 Vdc	190 Vdc	5 mA
GRID OFF		-200 Vdc	0.05 mA	-200 Vdc	-500 Vdc	0.5 mA
CATHODE (Ek)		-5.6 kV	405 mA	-5.2 kV	-5.8 kV	500 mA
COLLECTOR W/ RF	#1	3.58 kV	180 mA	64% X Ek ± 2%		425 mA
	#2	2.8 kV	185 mA	50% X Ek ± 2%		500 mA

NOTE 1: CATHODE VOLTAGE IS MEASURED WITH RESPECT TO GROUND.
NOTE 2: HEATER, COLLECTOR AND GRID VOLTAGES ARE MEASURED WITH RESPECT TO CATHODE.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	2:1	2.5:1
OUTPUT VSWR	1.75:1	2:1
MAXIMUM DUTY	——	CW
GRID CAPACITANCE	32 pF	50 pF
MIN HARMONIC SEPARATION	-4.5 dBc	-3 dBc *
NOISE POWER DENSITY	-30 dBm/MHz	-25 dBm/MHz
PRIME POWER	1398 W	1800 W
TEMPERATURE RANGE	-40° to 85°C	——

RF PERFORMANCE			
FREQ GHz	TYP SAT POWER OUTPUT (WATTS)	MIN SPEC POWER OUTPUT (WATTS)	TYP GAIN AT SPEC POWER dB
2.0	200	175	38
2.1	250	200	40
2.2	300	250	41
2.3	425	250	44
2.4	500	250	45
2.5	500	250 *	48
3.0	600	250	55
3.5	630	250	58
4.0	600	250	61
4.5	560	250	62
5.0	550	250	61
5.5	525	250	59
6.0	450	250	56
6.5	450	250	53
7.0	400	250	48
7.5	350	250	43
7.7	280	250	40
7.8	265	250	39
8.0	260	250	37

TYPICAL POWER OUTPUT IS SHOWN TO ILLUSTRATE CAPABILITY.

GAIN IS W/O EQUALIZER.

An ISO 9001:2000 Quality System Certified Company

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