## 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 5		55 mA
W/O RF	ONOOND	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 #1	3.58 kV	180 mA	64% X	Ek ± 2%	425 mA
W/ RF #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.

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