## TELEDYNE MEC

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MODEL NO. MEC 5407 (GR) MEC 5408 (FE)

7.5 to 18.0 GHz

TYPICAL OPERATING CONDITIONS					POWER SUPPLY REQUIREMENTS			
ELEMENT		VOLTAGE	CURRENT	VOLTAGE MIN	VOLTAGE MAX	CURRENT MAX		
HEATER		-6.3 Vdc	1.6 A	-6.0 Vdc	-6.6 Vdc	2 A		
HELIX	W/	RF	GROUND	7 mA	GROUND		12 mA	
	W/O	RF	GROUND	1 mA	GINO			
FE ON		-45 Vdc	0.1 mA	0	-75 Vdc	1 mA		
FE OFF		-1300 Vdc	0.1 mA	-1500 Vdc	-1700 Vdc	1 mA		
GRID ON		190 Vdc	1 mA	125 Vdc	250 Vdc	10 mA		
GRID OFF		-200 Vdc	0.1 mA	-200 Vdc	-500 Vdc	1 mA		
CATHODE (Ek)		-10.2 kV	270 mA	-10 kV	-10.5 kV	300 mA		
COLLEC	TOR	#1	5.3 kV	45 mA	52% × El	· ± 2%	100 mA	
W/ RI	F	#2	3.67 kV	218 mA	36% x El	< ± 2%	300 mA	

NOTE 1:	CATHODE	VOLTAGE	IS	MEASURED	WITH	RESPECT	TO	GROUND.
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NOTE 2: HEATER, COLLECTOR, GRID OR FOCUS ELECTRODE (FE) VOLTAGES ARE MEASURED WITH RESPECT TO CATHODE.

SELECTED PERFORMANCE	TYPICAL	SPECIFIED
INPUT VSWR	2:1	2.5:1
OUTPUT VSWR	2:1	2.25:1
MAXIMUM DUTY		CW
FE CAPACITANCE	50 pF	65 pF
GRID CAPACITANCE	37 pF	50 pF
MIN HARMONIC SEPARATION	-7 dBc	-5 dBc *
NOISE POWER DENSITY	-12 dBm/MHz	-10 dBm/MHz
PRIME POWER	1120 W	1400 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			
7.5	320	300 *	35			
8.0	325	300	45			
9.0	350	300	50			
10.0	325	300	55			
11.0	340	300	55			
12.0	350	300	55			
13.0	350	300	55			
14.0	350	300	55			
15.0	350	300	55			
16.0	340	300	55			
17.0	330	300	50			
18.0	320	300	35			

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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