X-Band Magnetron

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MSF1422B is designed for the magnetron of x-band radar system. The frequency range is fixed <9380-9440MHz> and the peak output power is 6kW.

MAXIMUM RATINGS ---

	Min	Max	Unit
Peak anode current	2.5	6.0	А
Perk anode power input	-	30	k₩
Duty cycle	-	0.001	-
Pulse duration	0.05	1.0	μs
Rate of rise of voltage pulse \cdots	-	• 70	kV/µs
Anode temperature		100	°C
V.S.W.R at the output coupler ····	Х-	1.5:1	_

--- ELECTRICAL ---

	Min	Typical	Max	Unit
Heater voltage (Note 1)	5.7	6.3	6.9	V
Preheat time	60	-	-	S
Peak anode voltage (Note 2) ····	4.4	4.6	4.8	kV
Peak output power (Note 2) ·····	6.0	6.5	-	kW
Frequency (Note 2)	9380	9410	9440	MHz

Note 1: Measured with heater voltage of 6.3V and no anode input power, the heater current limits are 0.5A minimum, 0.6A maximum. No reduction of heater voltage is required.

Note 2: Measured at peak anode current 4.6A

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<u>MSF1422B</u>

Κ J S φ 0.2 AB Н Anode temperature measured at this point G × Σ Ø BB ቢ A Δ Щ └╓└╓┙ Щ Ц z $\left(-\right)$ t, в Ŷ E F Α A D \mathbf{C} 0.2

	MIN	MAX	
А	15.	15.5	
в	16.25		
С	40.8	41.2	
D	4.8	5.2	
E	2.7	3.7	
F	—	36.0	
G	—	21.5	
н	—	74.0	

OUTLINE Note: Dimensions are in mm

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	MIN	MAX	
J	—	30.0	
К	240		
L	19.6	20.2	
м	88		
N	10. 0	—	
Р	_	86.0	
Q	112.6	113.2	
R	¢4. 3	¢4.375	
S	¢4.4	¢4.5	

Colour Element Green Heater Yellow Heater.Cathode

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