X-Band Magnetron

MSF1421B is designed for the magnetron of x-band radar system. The frequency range is fixed <9380-9440 MHz> and the peak output power is 4 kW.

---- MAXIMUM RATINGS ----

	Min	Max	Unit
Peak anode current	2.0	4.0	А
Average anode power input	-	13	W
Duty cycle	-	0.001	_
Pulse duration	0.05	1.0	us
Rate of rise of voltage pulse	_	70	kV/us
Anode temperature	_	100	degree
		C	entigrade
V.S.W.R at the output coupler	_	1.5:1	-

---- ELECTRICAL ----

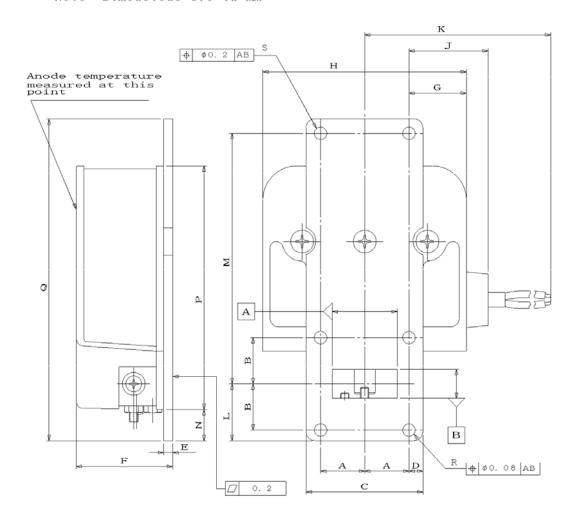
	Min	Typical	Max	Unit
Heater voltage	5.7	6.3	6.9	V
Heater current (Note 1)	_	-	-	А
Preheat time	60	-	-	S
Peak anode voltage (Note 2)	3.4	3.6	3.8	kV
Peak output power (Note 2)	3.6	4.0	-	kW
Frequency (Note 2)	9380	9410	9440	MHz

Notes:

- 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 at operating is required.
- 2. Measured at peak anode current 3.0A.

MSF1421B

OUTLINE Note: Dimensions are in mm



	MIN MAX		
Α	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	

	MIN	MAX	
J	_	30. 0	
К	240	_	
L	19. 6	20. 2	
М	88		
N	10. 0	_	
P	_	86. 0	
Q	112.6	113.2	
R	φ4. 3	φ4. 375	
S	φ4. 4	φ4. 5	

Lead Connections

Colour	Element	
Green	Heater	
Yellow	Heater, Cathode	