

S-Band Magnetron

M1302L is designed for the magnetron of s-band radar system. The frequency range is fixed <3040-3060MHz> and the peak output power is 30kw Min.

---- MAXIMUM RATINGS ----

	Min	Max	Unit
Peak anode current · · · · · · · · · · · · · · · · · · ·	6.0	12.0	A
Perk anode power input	_	100	kW
Duty cycle ·····	_	0.001	_
Pulse duration · · · · · · · · · · · · · · · · · · ·	_	1.0	μs
Rate of rise of voltage pulse \cdots	_	130	kV/μs
Anode temperature · · · · · · · · · · · · · · · · · · ·	_	120	°C
V.S.W.R at the output coupler ·····	_	1.5:1	_

---- ELECTRICAL ----

	Min	Typical	Max	Unit
Heater voltage (Note 1) · · · · · · · ·	5.7	6.3	6.9	V
Preheat time ······	180	_	_	S
Peak anode voltage (Note 2) ····	7.5	8.0	8.5	kV
Peak output power (Note 2) ·····	25	_	_	kW
Frequency (Note 2) · · · · · · · · · · · · · · · · · ·	3040	_	3060	\mathtt{MHz}

Note 1: Measured with heater voltage of 6.3V and no anode input power, the heater current limits are 1.1A minimum, 1.4A maximum.

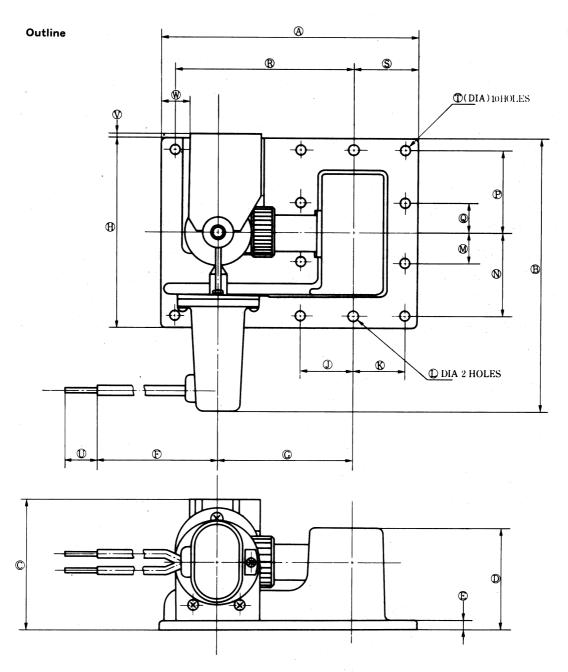
For average pulse input powers greater than 25 watts, the heater voltage must be reduced within 3 seconds after the application of h. t. according to the following schedule:

Meat	input power(W)	Heater	Voltage(V)
	Less than 25 ·····	6.3	
	25 to 62 · · · · · · · · · · · ·	5.3	
	62 to 100 · · · · · · · · · · · · · · · · · ·	4.5	

Note 2: Measured at peak anode current 8.0A

95-10





LEAD CONNECTIONS

COLOR	ELEMENT
GREEN	HEATER
YELLOW	HEATER,CATHODE

Outline Dimensions (All dimensions without limits are nominal.)

Jutime Difficultions (All difficults without finits are nothinal.)					
Ref	Inches	Millimeters	Ref	Inches	Millimeters
A	6. 500max	165. 1max	M	0.750 ± 0.002	19.050±0.051
В	7. 000max	177. 8max	N	2.031 ± 0.002	51.587 ± 0.051
c	3. 500max	88. 90max	P	2.031 ± 0.002	51. 587 ± 0. 051
D	2. 562max	65. 07max	Q	0.750 ± 0.002	19.050 ± 0.051
E	0. 236	6	R	4. 375	111.1
F	$11.750 \sim 12.50$	298.5~311.2	S	1. 700	43. 18
G	3.250 ± 0.250	82. 55 ±6. 35	Т	0. 250~0. 251	6. 35~6. 63
Н	4. 850max	123. 2max	U	0. 500	12. 70
J	1.281 ± 0.002	32.537 ± 0.051	V	0. 197max	5. 00max
K	1.281 ± 0.002	32.537 ± 0.051	w	0. 629	16
L	$0.250 \sim 0.251$	6. 35~6. 375			