L4651000

PULSE MAGNETRON

L-4651

5 Kilowatts Minimum Peak Power, Fixed Frequency 9375 ±40 MHz, Positive Pulsed.

The L-4651 is a positive anode magnetron designed for use in compact, lightweight, low cost commercial airborne and marine radar systems.

ABSOLUTE RATINGS

	Units	Min.	Max.
Heater Voltage	V	...	6.9
Heater Surge Current	a	...	6.0
Cathode Pre-heat Time	sec.	60	...
Pulse Current	a	2.0	5.5
Pulse Length	μsec.	.05	5.0
Rate of Rise of Voltage	kv/μs	25	50
VSWR	...	...	1.5:1
Duty Cycle	...	...	.0015
Average Input Power	W	...	30
Body Temperature	°C	−55	+125

TYPICAL OPERATION

	Units	Typ.	Min.	Max.
Heater Voltage (Oper.)	V	6.3	6.0	6.6
Heater Voltage (Stdby)	V	6.3	6.0	6.6
Heater Current (Stdby)	A	0.75	...	.85
Peak Power Output	kw	5.5	5.0	...
Fixed Frequency	GHz	9.375	9.335	9.415
Peak Anode Voltage	kv	4.6	4.1	4.7
Pulse Current	a	4.5	...	...
Pulse Length	μsec.	3.5	...	...
Duty Cycle	...	.00035	...	...
VSWR	...	1.05:1	...	...
R.F. Bandwidth*	MHz	0.5	...	0.7
Minor Lobe Ratio*	dB	8	6	...
Missing Pulses*	%	0.0	...	0.5
Pulling*	MHz	12	...	15
Pushing	MHz/a	1.0	...	1.5

*VSWR = 1.3:1

MECHANICAL RATINGS

Mounting Position . . . . . Any
Weight . . . . . 13 oz.
Anode Cooling . . . . . Conduction
Vibration . . . . . (55-2000 Hz) 1G
Shock . . . . . Non-operating (10 msec) 6G
Altitude . . . . . 45,000 ft.
Output Connector . . . . . Mates with UG-40A/U Modified with clearance holes.

Litton
ELECTRON TUBE DIVISION
San Carlos, California • Williamsport, Pennsylvania

SR MA2873

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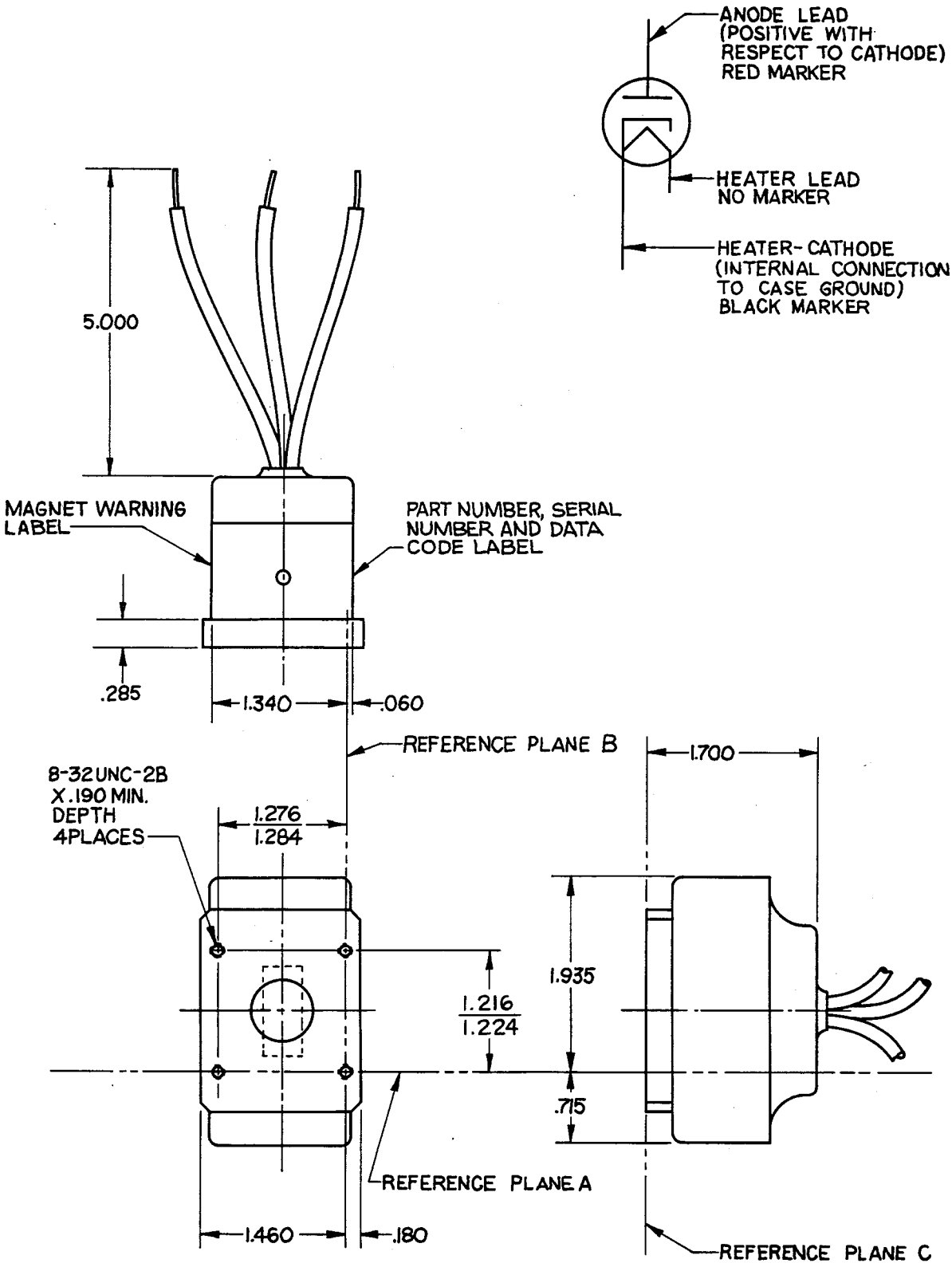
CAUTION
MICROWAVE RADIATION

Personnel should not be exposed to the microwave energy which may radiate from this device if improperly used or connected. All input and output microwave connections, waveguide flanges and gaskets must be microwave leak proof and properly engaged. Never operate this device without a microwave energy absorbing load attached. Never look into an open waveguide or antenna while this device is energized.



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