2450MHz 2kW Magnetron

2M130-06/NIL

Description:

The 2M130-06/NIL is a fixed frequency continuous wave magnetron intended for use in microwave ovens and industrial microwave heating applications. The 2M130-06/NIL can deliver 2 kW output power to a matched load at 2450 MHz.

Characteristic Parameters:

Electrical

Frequency:	2455 MHz
Power:	2 kW
Filament Voltage (Operational):	See figure 1
Filament Voltage (Stand-by):	4.6 V
Filament Current (Stand-by):	20 A
Filament Surge Current (Peak):	100 A
Filament Pre-heating time:	8 sec
Recommended Operation:	Continuous
Anode Potential:	Grounded
Filament Potential:	-4.1 kV
Magnet:	Permanent magnet
Average Anode Current:	750 mAdc
Peak Anode Current:	2100 mAdc
Average Anode Input:	3 kW
Load VSWR (Continuous):	4 (max.)
Anode Core Temperature:	160° C
Storage Temperature:	-30° C to 60° C
Antenna Temperature: (metal-ceramic seal point)	350° C
Case Temperature:	100° C

Note: Specifications subject to change without notice.

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Characteristic Parameters (continued):

Mechanical

Cooling:	Forced air (see figure 4)
Dimensions: (see figure 5)	
Width:	120 mm (max.)
Length:	129 mm (max.)
Height (excluding antenna):	125 mm (max.)
Antenna Height:	48 mm (max.)
Weight:	Approx. 2.1 kg
Mounting Position:	Vertical axis, either end up

Available Accessories:

Isolator:	2722-162-11171
Launcher:	WR340LAUNB
Load:	2722-162-10511
Directional Coupler:	WR340-WDC0-2.0
Power Meter:	WR340-WBPM-3-0
Tuner:	WR340-WT0-6-0 / WR340ECOTUNE3X

Note: Specifications subject to change without notice.

Performance Characteristics:

Figure 1: Reduction of Filament Voltage vs. Anode Current

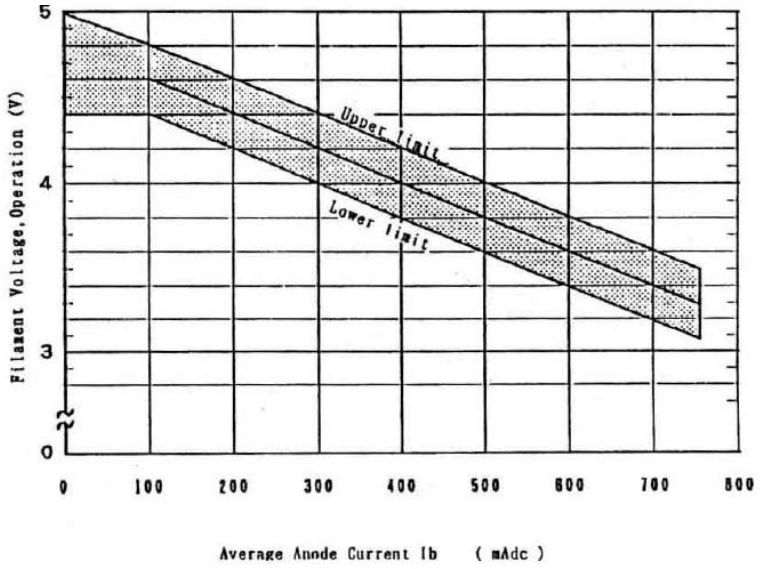
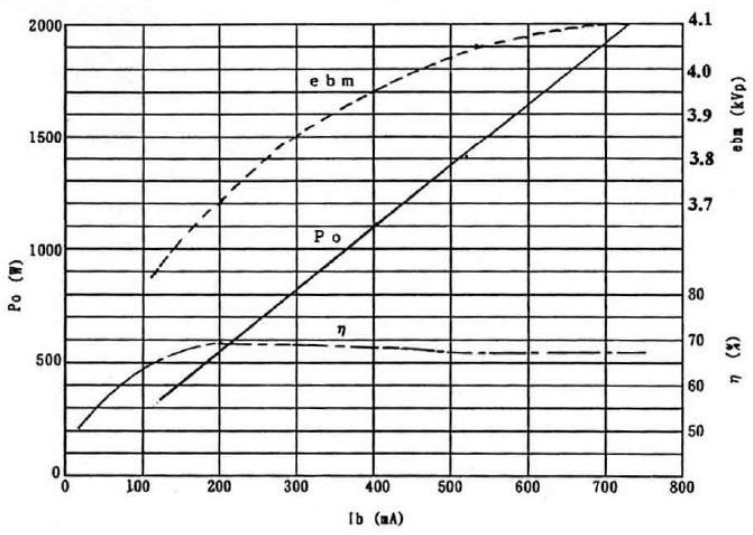


Figure 2: Performance Chart



Test conditions

1. Load VSWR : $\sigma L \leq 1.1$
2. Anode supply : Single phase, full wave rectifier without filter
3. Filament voltage : 3.4 V

Note: Specifications subject to change without notice.

Figure 3: Rieke Diagram

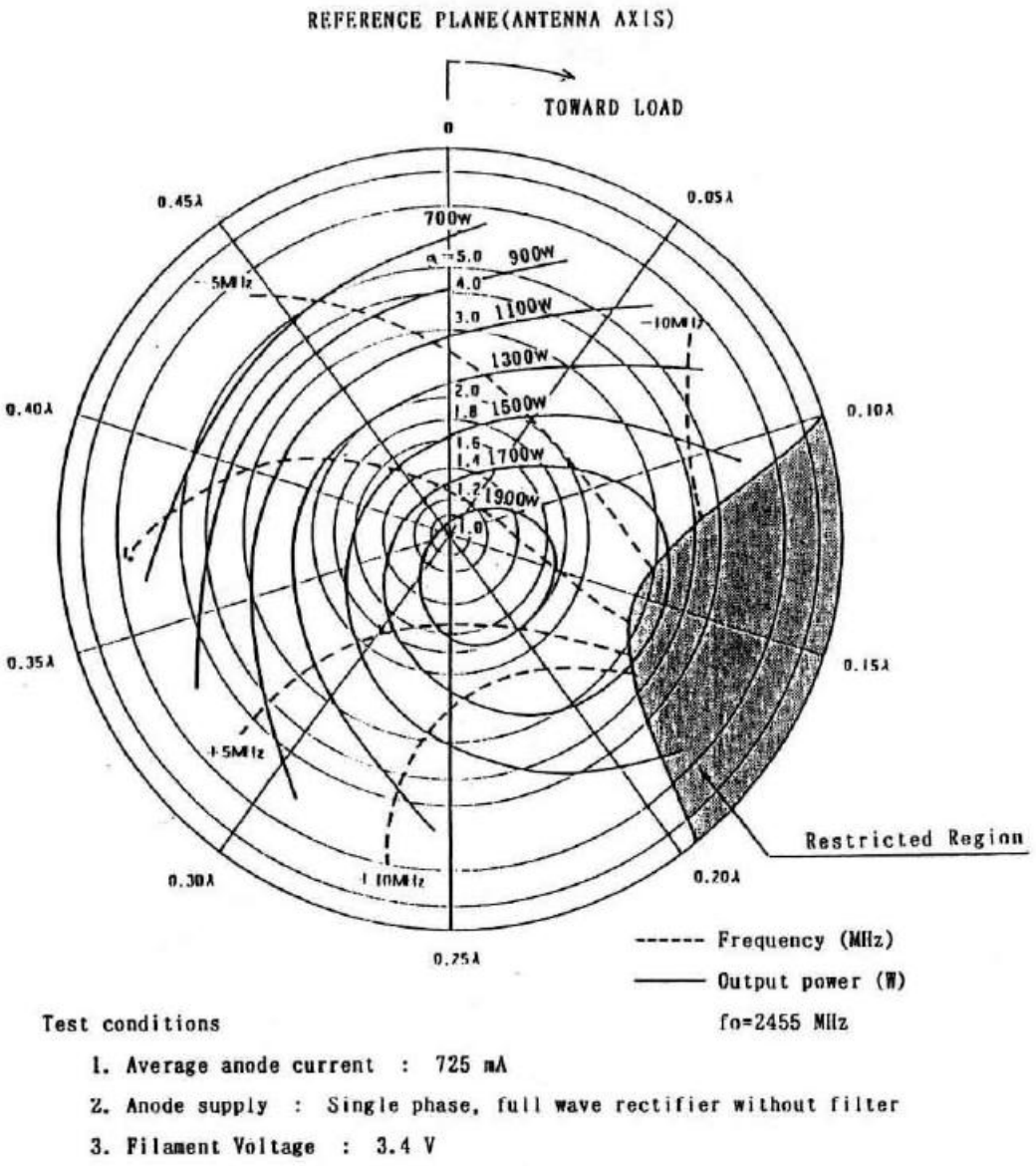


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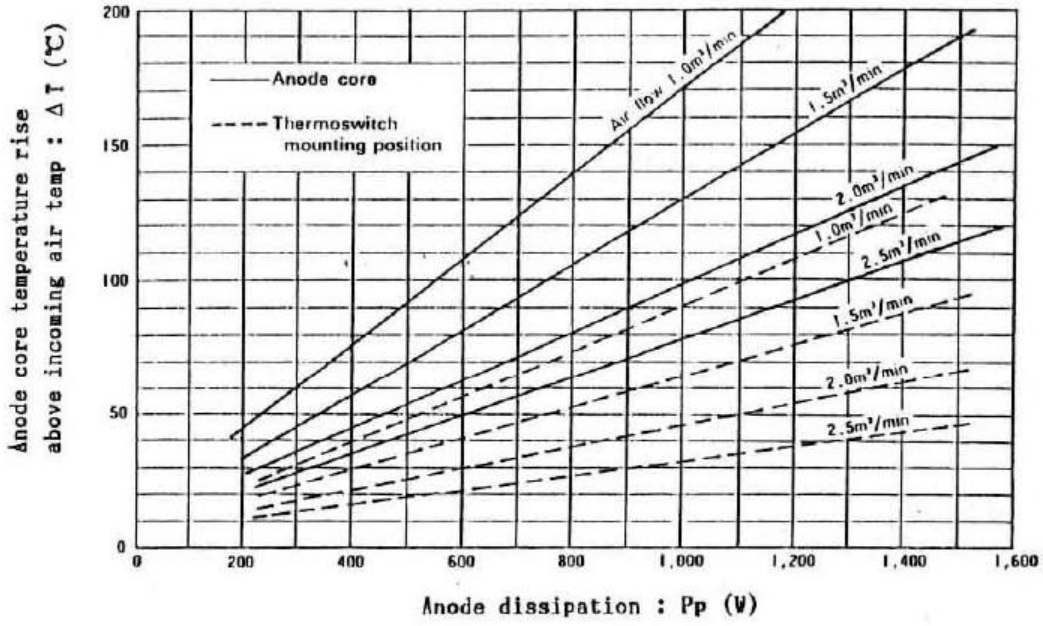
Figure 4: Cooling Requirements

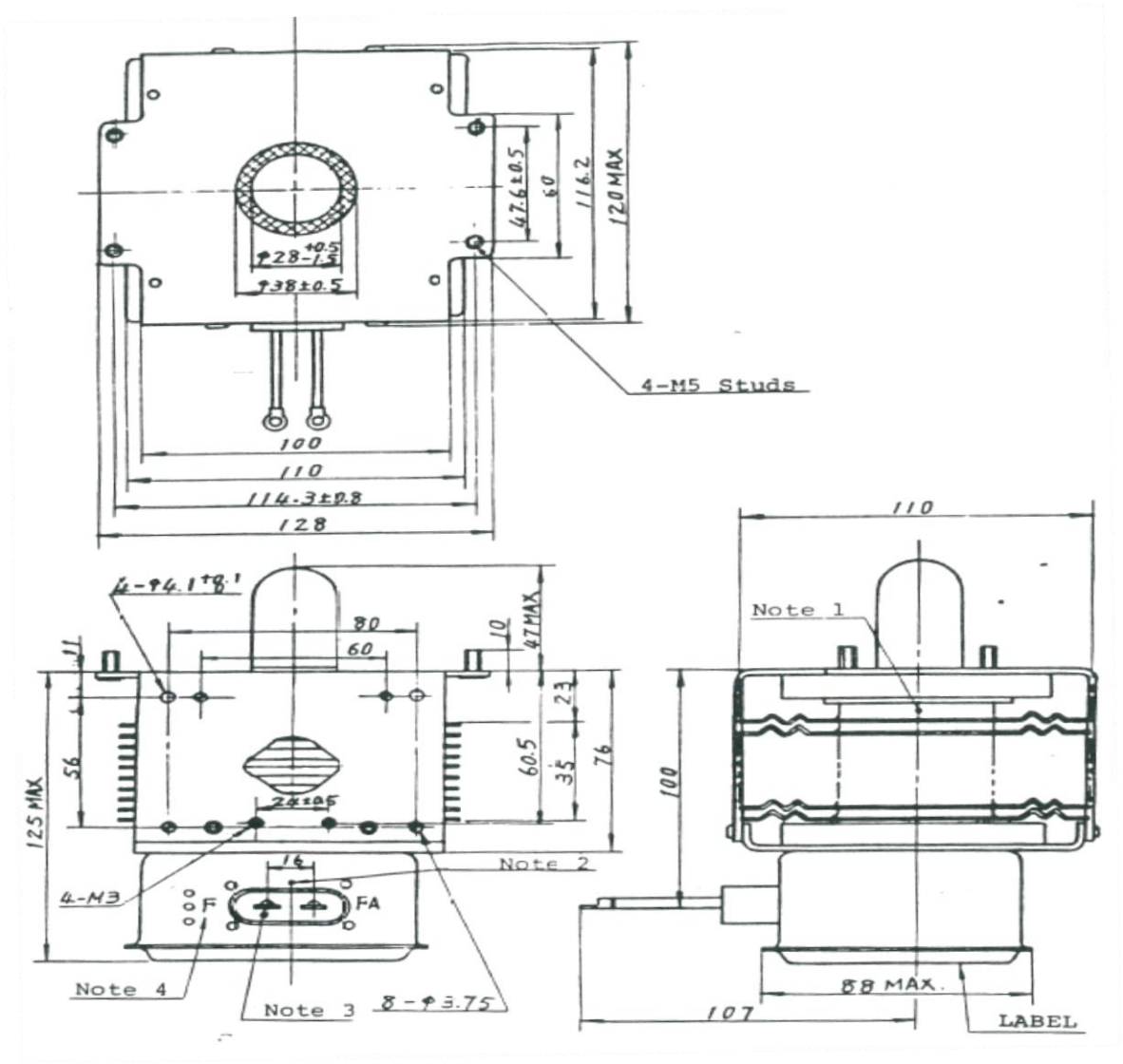


Anode Dissipation vs. Anode Core Temperature Rise

Note: Specifications subject to change without notice.

Dimensional Drawings:

Units: mm



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