

# DESCRIPTION AND RATING

## REFERENCE CAVITY GL-1Q26-A

The GL-1Q26-A is a fixed-frequency, transmission-type, vacuum-sealed reference cavity for use as a frequency-determining reference at 9280 megacycles.

Particular advantages of this cavity are its ability to operate over a wide temperature range, from -40 to +100 C, with a change of only 0.3 megacycle in resonant frequency and the fact that it can be used in a pressurized system.

### TECHNICAL INFORMATION

#### GENERAL

##### Electrical

Resonant Frequency	9280	Megacycles
Cavity mounted between a source and a load whose voltage-standing-wave-ratio = 1.05 maximum		
Change in Resonant Frequency		
With Vibration = 10 g	$\pm 0.1$ Max	Megacycles
With Pressure = 100 millimeters of mercury to 45 pounds per square inch absolute	$\pm 0.1$ Max	Megacycles
With Temperature = -40 C to +100 C	$\pm 0.3$ Max	Megacycles
With Creep*	$\pm 0.3$ Max	Megacycles
Loaded Q	1000 - 1500	
Cavity mounted between a source and a load whose voltage-standing-wave-ratio = 1.05 maximum		
Insertion Loss at Resonant Frequency	5 - 8	Decibels

##### Mechanical

Ambient Temperature Range	-55 to +100	C
Net Weight, approximate	7	Ounces
Mounting Position - Any		

##### MAXIMUM RATINGS

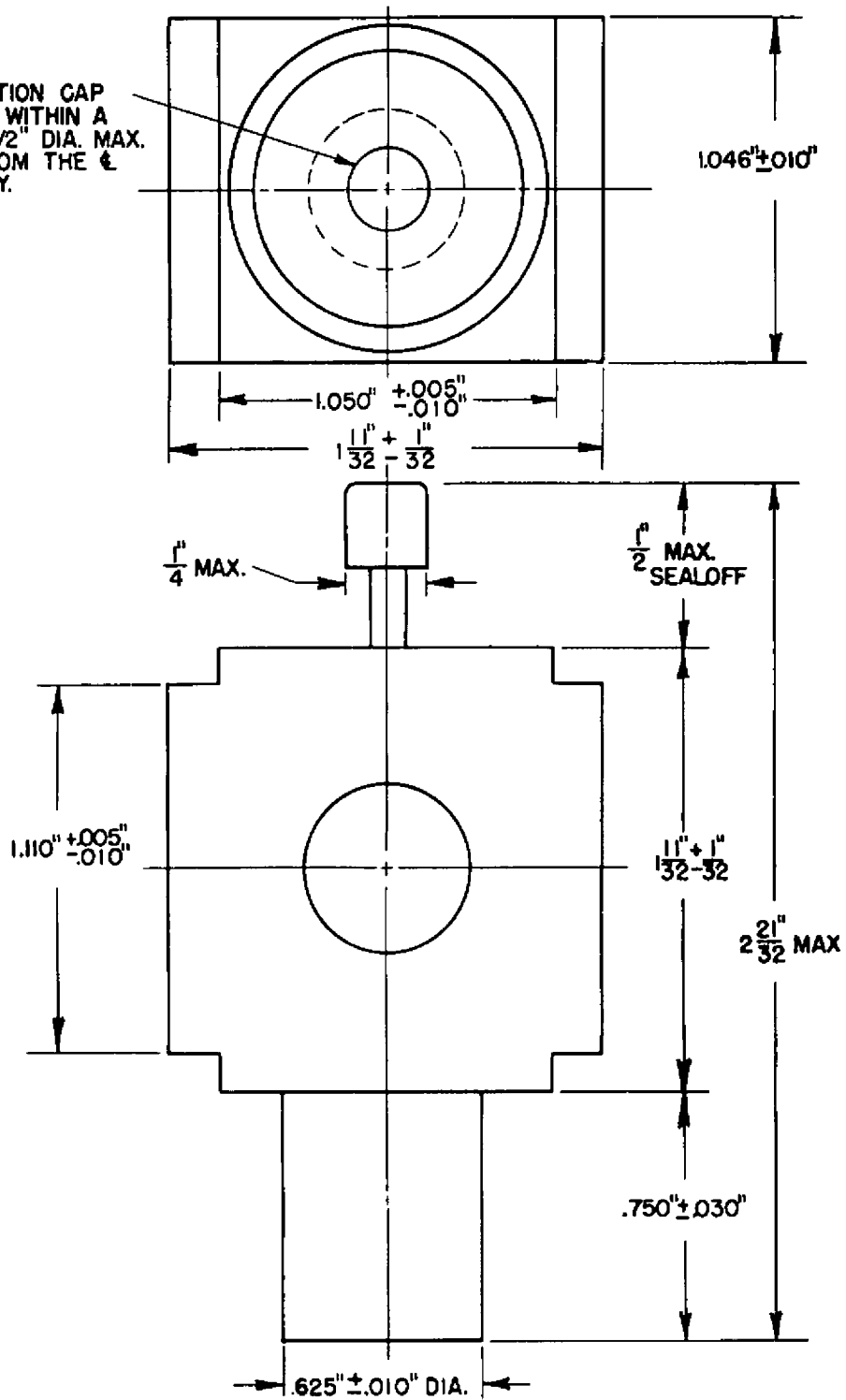
Incident Peak Power, maximum	5	Kilowatts
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\* The small hysteresis change in length of a metal due to its being taken through heating and cooling cycles.

GENERAL  ELECTRIC

NOTE:

THE TUBULATION GAP SHALL FALL WITHIN A CIRCLE OF 1/2" DIA. MAX. LOCATED FROM THE  $\phi$  OF THE BODY.



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Outline  
GL-1Q26-A

**GENERAL  ELECTRIC**

ELECTRONICS DIVISION, TUBE DEPARTMENT  
SCHENECTADY, NEW YORK