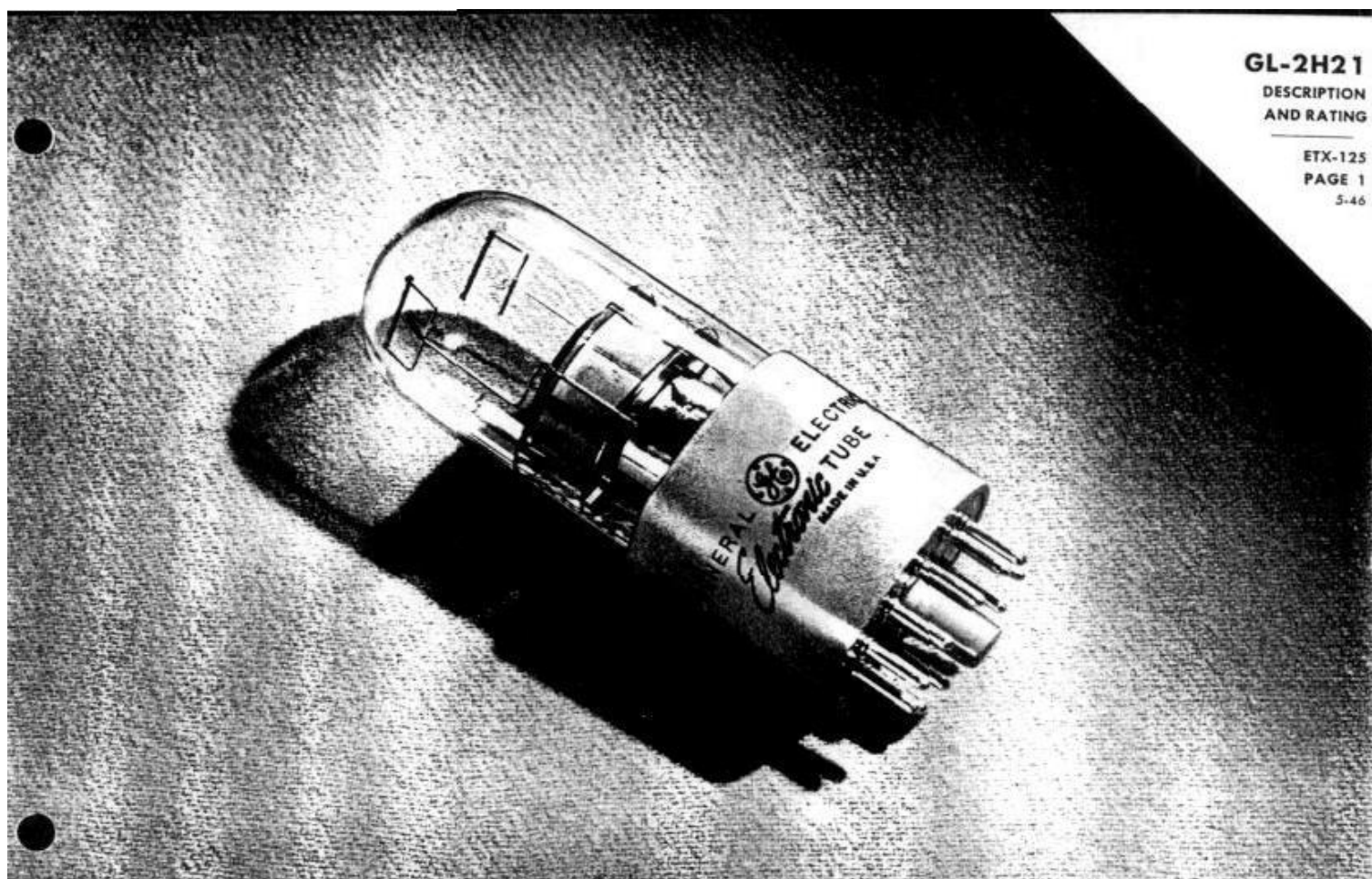


GL-2H21
DESCRIPTION
AND RATING

ETX-125
PAGE 1
5-46



PHASITRON

DESCRIPTION

The GL-2H21 is a phase-modulator tube for use in FM transmitters. It is intended for operation up to 500 kilocycles. As a modulator tube, the GL-2H21 makes possible the introduction of comparatively

wide-phase excursions at audio-frequency rates in a crystal-controlled, radio-frequency carrier. The modulating circuit audio response is such that the tube has a wide-swing, frequency-modulated output.

TECHNICAL INFORMATION

These data are for reference only. For design information refer to specifications.

GENERAL CHARACTERISTICS

Number of electrodes	10
Electrical	
Cathode—indirectly heated	
Heater voltage	6.3 volts
Heater current	0.3 ampere
Direct interelectrode capacitance, approx	
Deflectors to plate 1	0.08 micromicrofarad
Plate 1 to plate 2	4.0 micromicrofarad
Frequency for maximum ratings	500 kilocycles
Mechanical	
Net weight, approx	3 ounces
Shipping weight, approx	1 pound
Mounting position	Any

GENERAL  ELECTRIC


Electronic
TUBE

TECHNICAL INFORMATION (CONT'D)

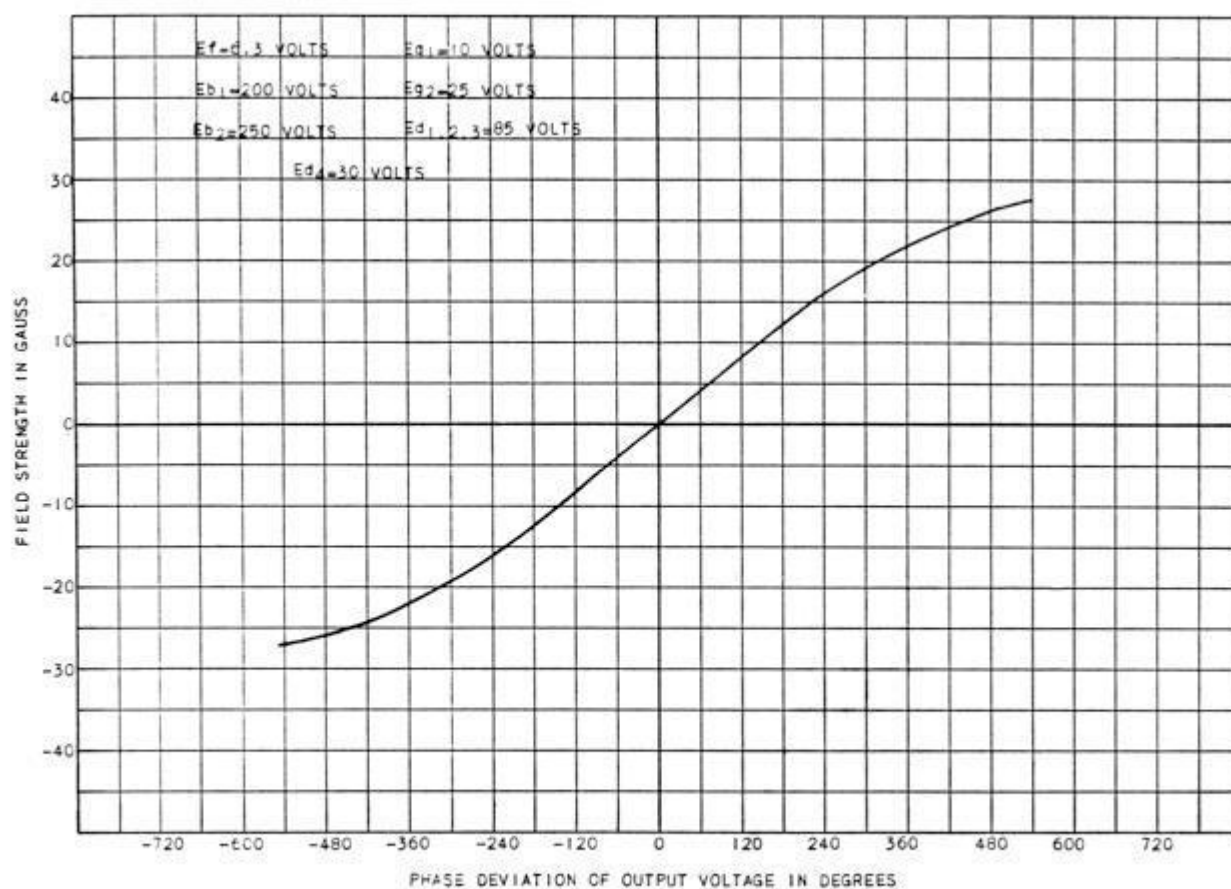
MAXIMUM RATINGS

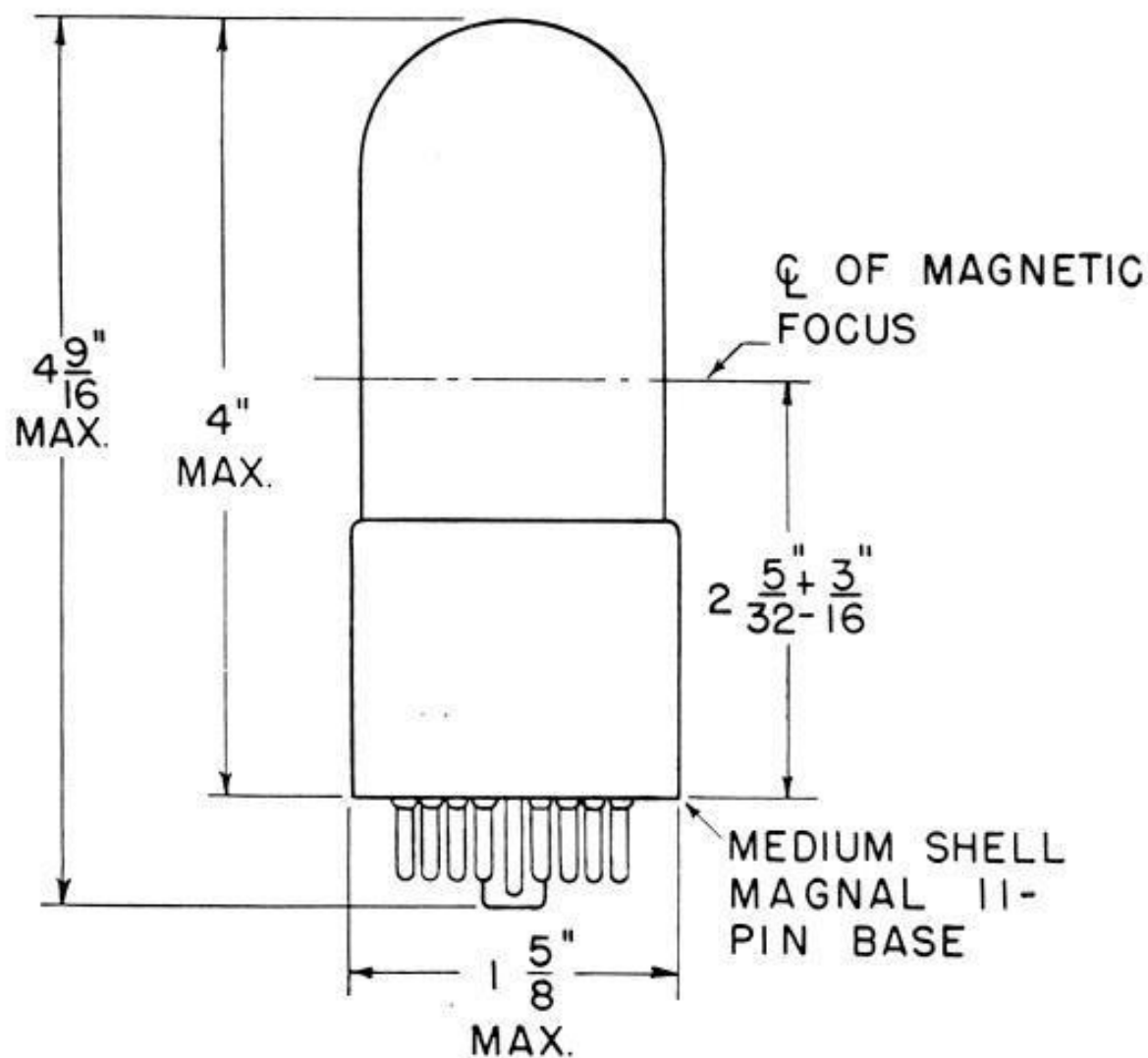
Plate No. 1 voltage.....	300 volts
Plate No. 2 voltage.....	300 volts
Deflectors No. 1, 2 and 3 voltage.....	100 volts
Deflector No. 4 voltage.....	100 volts
Grid No. 1 voltage.....	25 volts
Grid No. 2 voltage.....	150 volts
Cathode current.....	6 milliamperes

CHARACTERISTICS AND TYPICAL OPERATION

Phase modulator*	
Plate No. 1 voltage.....	200 volts
Plate No. 2 voltage.....	250 volts
Deflectors No. 1, 2 and 3 voltage.....	85 volts
Deflector No. 4 voltage.....	60 volts
Grid No. 1 voltage.....	10 volts
Grid No. 2 voltage.....	25 volts
Cathode current.....	4 milliamperes
Radio-frequency driving voltage, phase to neutral.....	35 volts rms
Audio-modulating power for $\approx 180^\circ$ phase shift, approximate.....	50 milliwatts
Radio-frequency output voltage.....	4 volts rms
Distortion at $\approx 180^\circ$ phase shift.....	1.4 per cent

*Refer to ETX-109, application data for circuit.

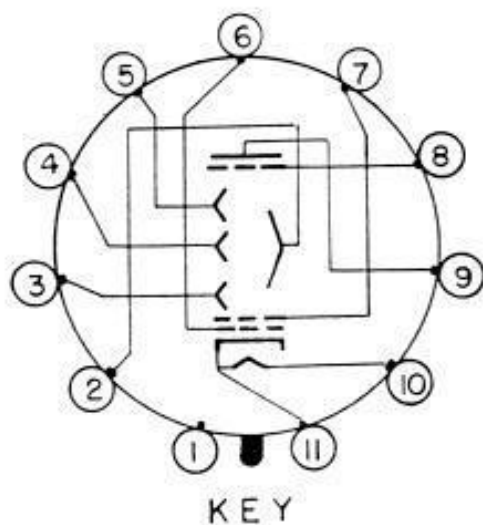
GL-2H21
MODULATION CHARACTERISTIC



GL-2H21 OUTLINE

N-51066AZ

11-1-45



KEY

N-15066AZ-1

11-1-45

TERMINAL CONNECTIONS			
PIN	CONNECTION	PIN	CONNECTION
1	INTERNAL CONNECTION	6	GRID NO. 1
2	DEFLECTOR NO. 4	7	GRID NO. 2
3	DEFLECTOR NO. 1	8	PLATE NO. 1
4	DEFLECTOR NO. 2	9	PLATE NO. 2
5	DEFLECTOR NO. 3	10	HEATER
		11	HEATER AND CATHODE