



ELECTRONIC TUBE REFERENCE

12H31

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

HEPTODE

Heptode frequency converter for superheterodyne receiving equipment. Its multi-grid construction combines local oscillator and mixer functions, translating incoming radio-frequency signals to the receiver intermediate frequency.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	12.6 V / 150 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Heptode	
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	100 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM SCREEN DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	14 mA
<i>Tesla 12H31 indirectly heated variable-mu heptode frequency-changer mixer, heater 12.6 V at 150 mA. Maximum cathode current 14 mA. Manufacturer maximum plate voltage 300 V, screen voltage 100 V, plate and screen dissipation 1 W each. Conversion conductance about 0.455–0.475 mA/V at specified mixer operating points is converter-specific and should not be represented as intrinsic static gm. Interelectrode capacitances explicitly published.</i>	

150 mA series-heater mixer heptode for radio receiver frequency-converter service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1969 Tesla Manual of Electronic Tubes

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1969 TESLA MANUAL OF ELECTRONIC TUBES

Section 1 · Heptode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	12.6 V	Published nominal value
Heater current	150 mA	Published nominal value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	1 W	Published maximum rating
Application	Mixer	Printed source application

TUBE TINKER

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and their source documents.

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