

ELECTRONIC TUBE REFERENCE

BM10

Voltage Tetrode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TETRODE

Guard-ring tetrode electrometer valve with extremely low control-grid current, designed for precision measurement and amplification of exceptionally small electrical currents.

GENERAL CHARACTERISTICS

BASE DESIGNATION	InternationalOctal	BASE PINS	8
NOMINAL HEATER	4 V / 25 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
TRANSCONDUCTANCE	0.00016 S
WARM-UP TIME	45 s
Promoted fields were populated only where the Ferranti sheet maps cleanly to the locked schema; additional ratings and operating values are retained in TUBE_SECTION_PARAMETER.	

Guard-ring tetrode electrometer valve with extremely low control-grid current for precision low-current measurements.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Ferranti

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

1963 FERRANTI

Section 1 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage	4.6 V	Point1
Screen voltage	6 V	Point1
Control-grid voltage	-3 V	Point1
Anode current	275 uA	Point1
Screen current	430 uA	Point1
Anode voltage	6 V	Point2
Screen voltage	4 V	Point2
Anode current	190 uA	Point2
Anode voltage	4 V	Point3
Screen voltage	3 V	Point3
Anode current	100 uA	Point3

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	160 uS	Point1
Amplification factor	2 ratio	Point1
Transconductance	100 uS	Point2
Amplification factor	1.8 ratio	Point2
Transconductance	90 uS	Point3
Amplification factor	2 ratio	Point3

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output capacitance	6.9 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Control-grid to anode capacitance	5 pF	—
Anode to screen-grid capacitance	1.9 pF	—