



ELECTRONIC TUBE REFERENCE

7438

Voltage - Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Reliable subminiature pentode for guided-weapon equipment, with a short suppressor base allowing grid 3 to serve as a second control electrode. Its construction supports specialized signal-control functions under severe vibration.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B8D/F	BASE PINS	8
NOMINAL HEATER	6.3 V / 175 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
TRANSCONDUCTANCE	0.0025 S
AMPLIFICATION FACTOR	34
MAXIMUM PLATE VOLTAGE	350 V
MAXIMUM SCREEN VOLTAGE	350 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM SCREEN DISSIPATION	0.4 W
MAXIMUM CATHODE CURRENT	12 mA
<i>Promoted values are taken directly from the supplied datasheet; additional ratings, characteristics and operating points are preserved in TUBE_SECTION_PARAMETER.</i>	

Reliable subminiature short-suppressor-base pentode with the suppressor grid usable as a second control electrode, intended for guided-weapon equipment.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Mullard

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

1963 MULLARD

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage maximum	350 V	—
Screen-grid supply voltage maximum	350 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid1-to-plate capacitance maximum	0.015 pF	ExternalShield
Grid3-to-plate capacitance maximum	3 pF	ExternalShield
Grid3-to-all-electrodes capacitance	6.5 pF	ExternalShield
Input capacitance	4.2 pF	ExternalShield
Output capacitance	3.1 pF	ExternalShield

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	—
Screen-grid voltage	100 V	—
Plate current	3 mA	—
Screen-grid current	2.25 mA	—
Grid1 transconductance	2500 uS	—
Grid3 transconductance	350 uS	Grid3Bias=-2V
Screen-to-control-grid amplification factor	34 ratio	—
Maximum noise output voltage	200 mV	Vibration=20g;60-1000Hz

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

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