



ELECTRONIC TUBE REFERENCE

EM11

Tuning Indicator electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TUNING INDICATOR

Dual-sensitivity electron-ray tuning indicator with two shadow-angle systems for visual tuning over a broad range of receiver signal strengths.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 100 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION 1 Tuning Indicator	
TRANSCONDUCTANCE	0.000235 S
MAXIMUM PLATE VOLTAGE	18.5 V
MAXIMUM SCREEN VOLTAGE	6.25 V
MAXIMUM PLATE DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	5 mA
<i>Promoted ratings and characteristics are taken from the printed target-tube entry in the approved PDF.</i>	

SECTION 2 Triode	
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	5 mA
<i>Second tuning-indicator/control system.</i>	

Dual-sensitivity tuning indicator tube with two shadow-angle systems for receiver tuning indication.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 RFT Rundfunk Technik

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

1953 RFT RUNDFUNK TECHNIK

Section 1 · Tuning Indicator

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Indicator screen voltage	250 V	—
Indicator screen voltage maximum	250 V	—
Cold indicator screen voltage maximum	550 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-control range	0 to -4 V	Range1

1953 RFT RUNDFUNK TECHNIK

Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-control range	0 to -20 V	Range2



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1959 Telefunken

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

1959 TELEFUNKEN

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Target voltage	250 V	—
Target current	0.46 mA	—
Target voltage	200 V	—
Target current	0.33 mA	—
Target voltage	100 V	—
Target current	0.1 mA	—
Target voltage maximum	250 V	—
Target voltage minimum	90 V	—
Target cold voltage	550 V	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1981 Russian Tubes Katsnelson and Larionov

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

1981 RUSSIAN TUBES KATSNELSON AND LARIONOV

Section 1 · Tuning Indicator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal/basic-parameter heater condition.
Heater current	100 mA	Published heater current.
Plate current	0.475 mA	Published basic-parameter operating point.
Screen current	0.2 mA	Published basic-parameter operating point.
Transconductance	235 μ S	Published basic-parameter value; normalized to μ S.
Logarithmic input-current range lower bound	0.000000001 mA	Published in the filename-designated tube entry.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Logarithmic input-current range upper bound	0.1 mA	Published in the filename-designated tube entry.
Service life	2000 h	Published in the filename-designated tube entry.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	18.5 V	Published limiting operating value.
Maximum screen voltage	6.25 V	Published limiting operating value.