



ELECTRONIC TUBE REFERENCE

EMM801

Tuning Indicator electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

TRIODE-TRIODE-TUNING INDICATOR

Voltage-comparison indicator combining two matched triode control systems with a fluorescent shadow display for balancing, monitoring, and null-indication applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	19000 Ω
TRANSCONDUCTANCE	0.001 S
AMPLIFICATION FACTOR	19
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	0.2 W
MAXIMUM CATHODE CURRENT	12 mA
Triode section; maximum ratings are published per system.	

SECTION2 Triode	
PLATE RESISTANCE	19000 Ω
TRANSCONDUCTANCE	0.001 S
AMPLIFICATION FACTOR	19
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	0.2 W
MAXIMUM CATHODE CURRENT	12 mA
<i>Triode section; maximum ratings are published per system.</i>	

SECTION3 Tuning Indicator	
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM CATHODE CURRENT	12 mA
<i>Visual indicator section; specialized indicator values preserved as parameters.</i>	

Voltage-comparison indicator tube combining two triode control systems with a visual shadow display.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 AEG

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

1953 AEG

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	—
Control-grid voltage	-2 V	—
Plate current	2.8 mA	—
Transconductance	1000 μ S	—
Amplification factor	19	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
No-load plate voltage	—550 V	—
Heater-cathode voltage	—100 V	—

1953 AEG

Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	—
Control-grid voltage	-2 V	—
Plate current	2.8 mA	—
Transconductance	1000 μ S	—
Amplification factor	19	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
No-load plate voltage	—550 V	—
Heater-cathode voltage	—100 V	—

Section 3 · Tuning Indicator

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Supply voltage	200 V	—
Supply voltage	250 V	—
Indicator load resistance	400 kOhm	—
Maximum shadow-length difference	2 mm	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1959 Telefunken

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

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode plate voltage	100 V	EachTriode
Triode control-grid voltage	-2 V	EachTriode
Triode plate current	2.8 mA	EachTriode
Triode transconductance	1000 uS	EachTriode
Triode amplification factor	19 ratio	EachTriode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Display supply voltage	200 V	—
Display supply voltage	250 V	—
Anode series resistance	400 kOhm	EachTriode
Display current	1.4 mA	Ub=200V
Display current	1.8 mA	Ub=250V
Display cold voltage	550 V	—
Display voltage maximum	300 V	—