



ELECTRONIC TUBE REFERENCE

B30M1

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

RFT direct-view television picture tube with electromagnetic focusing and electromagnetic deflection. Its high-voltage screen system is intended for monochrome receiver presentation; larger variants include an ion-trap magnet.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 500 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	12000 V
MAXIMUM SCREEN VOLTAGE	500 V
MAXIMUM CATHODE CURRENT	0.035 mA
<i>Cathode-ray electron-gun/display system with ion-trap magnet, electromagnetic focusing and deflection.</i>	

A cathode-ray picture tube for direct viewing in television receivers, with a whitish 180 × 240 mm screen, electromagnetic focusing and deflection, and an ion-trap magnet.

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 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode operating voltage	10 kV	—
Screen-grid operating voltage	450 V	—
Cathode current	30 μ A	—
Ion-trap magnetic field	60 G	—
Anode minimum voltage	8 kV	—
Cathode peak current maximum	100 μ A	—
Heater-cathode voltage maximum	125 V	—
Screen loading maximum	5 mW/cm ²	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cutoff voltage	-35 to -90 V	—
Warm-up time	1 min	—

TUBE TINKER

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

[Catalog](#)
[Tube types](#)
[Full books](#)
[Blog](#)
[Feedback & corrections](#)

© 2026 Tube Tinker