



ELECTRONIC TUBE REFERENCE

A2813W

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

European rectangular monochrome television picture tube with electrostatic focusing, magnetic deflection, and an aluminized or metal-backed screen. Manufacturer documentation supports direct-view receiver service with wide-angle deflection and compact cabinet geometry.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	11 V / 68 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Cathode Ray

No fixed ratings recorded.

Applicable promoted fields mapped semantically from the printed ratings; device-specific electrical limits and operating conditions are preserved densely in TUBE_SECTION_PARAMETER.

Rectangular TV picture tube without ion trap, electrostatic focus and 90-degree magnetic deflection.

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

Section 1 · Cathode Ray

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Television picture display	—

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Electrostatic	—
Deflection method	Magnetic	—
Deflection angle	90 deg	—
Faceplate light transmission	60 %	—
Screen persistence	Medium	—

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen diagonal	262.5 mm	—
Screen width	228 mm	—
Screen height	171 mm	—
Screen construction	Metal-backed grey glass	—
Ion trap	Not required	—

1962 ITT

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

1962 ITT

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	11 V	—
Heater Current	68 mA	—
Anode Voltage	11600 V	—
Anode Voltage Maximum	12000 V	—
Screen Grid Voltage Minimum	180 V	—
Screen Grid Voltage Maximum	450 V	—
Typical Screen Grid Voltage	250 V	—
Negative Grid 3 Voltage Maximum	-100 V	—
Cathode Voltage Maximum	100 V	—
Deflection Angle Diagonal	90 degree	—



SOURCE DATA APPENDIX

1976 ITT Picture Tubes

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

1976 ITT PICTURE TUBES

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
A28	-13 W	—
Published value	28 cm	—
i approx.	75 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
cluding tube mount for battery-operated Ugagsa @	13 kV	—
Uga @ 0...350	0–350 V	—
Uk cutortr @ 45	32–58 V	—
s 9 U	9395 a	—
s 9 U9395a max @ @ (2)	14 kV	—
U93r-lfia min @ @	10 kV	—
Uga max	450 V	—
g k (-Ug4) max	100 V	—
Published value	450 V	—
Ugi_min	180 V	—
Uk max	100 V	—
Electron Gun Tetrode with Einzel- Ukpmx ®	380 V	—
Base Special Miniature P iiak	10 mW/cm	—
Focusing Method Electrostatic U=k pmax	13 V	—
Deflection Angles Diagonal 90° Zifk max @	0.1 MQ	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Neck Diameter	20 mm	—
Face Shape Spherical Ck approx.	5 pF	—
Material Filter-Glass Cg3g5aim approx.	700 pF	—
(Light Transmission Cqg3a	5 a	—
(Light Transmission Cqg3a5a/m' approx. (2)	150 pF	—
Published value	57 %	—
Minimum Useful 228 x	171 mm	—
Dimensions Diagonal	262.5 mm	—
Overall Length 245 f	5 mm	—
Weight	20 kg	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
A28	-13 W	—

TUBE TINKER

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and their source documents.

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