

ELECTRONIC TUBE REFERENCE

31E13

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Twelve-inch flat-face aluminized cathode-ray tube primarily designed for radar PPI applications. Magnetic focus and deflection combine with T6 or T7 long-afterglow screens to retain plotted radar information.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B12A	BASE PINS	12
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	15500 V
CRT electrode ratings and operating data preserved in parameter rows.	

Magnetically focused and deflected 12-inch flat-face aluminised cathode-ray tube primarily designed for PPI applications, available with T6 or T7 long-afterglow screens and conforming to British Service specification CV429.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 AEI Industrial Valves

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

1961 AEI INDUSTRIAL VALVES

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumSecondAnodeVoltage	15.5 kV	Absolute maximum
MinimumSecondAnodeVoltage	9 kV	—
MaximumFirstAnodeVoltage	600 V	Absolute maximum
Maximum Heater Cathode Voltage	150 V	HeaterNegative DC
TypicalSecondAnodeVoltage	15 kV	—
TypicalFirstAnodeVoltage	300 V	—
GridBiasCutoff	-90--60 V	—
PeakToPeakModulatingVoltage	24 V	Modulation up to 50 uA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid Earth Capacitance	—8 pF	With holder capacity balanced out
CathodeEarthCapacitance	—8 pF	With holder capacity balanced out
MaximumSpotDeviation	—15 mm	Unfocused and undeflected spot from screen centre
MaximumUnfocusedSpotDiameter	—15 mm	50 uA beam current
MaximumLineWidth	—0.5 mm	50 uA beam current
T6ScreenPersistence	50 s	Long yellow afterglow
T7ScreenPersistence	200 s	Very long orange afterglow
UsefulScreenDiameter	265— mm	—

1961 Associated Electrical Industries

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

1961 ASSOCIATED ELECTRICAL INDUSTRIES

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MinimumSecondAnodeVoltage	9 kV	—
MaximumFirstAnodeVoltage	600 V	—
Maximum Heater Cathode Voltage	150 V	HeaterNegative
TypicalSecondAnodeVoltage	15 kV	—
TypicalFirstAnodeVoltage	300 V	—
Grid Earth Capacitance	8 pF	Maximum
CathodeEarthCapacitance	8 pF	Maximum

TUBE TINKER

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