ELECTRONIC TUBE REFERENCE

4018BD

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Early electrostatic cathode-ray oscillograph tube with a long-afterglow screen, intended for measurement display; manufacturer data specifies deflection sensitivity and operation over roughly 300–2000 V anode supply.

General characteristics

BASE DESIGNATION	—	**BASE PINS**	—
NOMINAL HEATER	0.75 V / 900 mA	**PARALLEL HEATER**	— / —
HEATING	Direct	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	2000 V

Published ratings/characteristics promoted; remaining useful source values represented as parameters.

Standard Valves 4018BD is a gas-filled cathode-ray tube specified for replacement service. It operates over a 300-2000 V anode range with 350 V normal anode voltage and a 0-50 V shield supply. Its screen characteristic is 10-15 second afterglow. One plate of each deflecting-plate pair is connected to the anode.

SOURCE OPERATING CONDITIONS

1937 Standard Valves

SOURCE PDF

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

1937 STANDARD VALVES

Section 1 · Cathode Ray

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Current Range	**700 mA–1.1 A**	Published range
Anode Voltage Range	**300–2000 V**	Published range
Normal Anode Voltage	**350 V**	Published specification
Shield Voltage Range	**0–50 V**	From a potentiometer

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Protective Resistance	**2000 ohm**	Include in shield circuit and anode circuit
Replacement Type	**4050-BD**	Published specification

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen Afterglow	**10-15 seconds in the dark**	Published specification
Deflection Plate Connection	**One plate of each deflecting pair is connected to the anode**	Published specification

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1946 Standard Telephone and Cables

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

1946 STANDARD TELEPHONE AND CABLES

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Heater/filament voltage	**0.75 V**	—
Heater/filament current	**900 mA**	—

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Maximum direct anode voltage	**2000 V**	—
Anode voltage range	**300–2000 V**	—
Normal anode voltage	**350 V**	—
Shield voltage range	**0–50 V**	—

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