

ELECTRONIC TUBE REFERENCE

50CD6G

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

50 V-heater power pentode designed as a television line time-base output valve, providing the switching current and multi-kilovolt pulse tolerance required for horizontal scanning.

GENERAL CHARACTERISTICS

BASE DESIGNATION	5BT	BASE PINS	8
NOMINAL HEATER	50 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

5BT - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – IS	A	IS – Internal Screen	CONNECTED
PIN2 – H	–	H – Heater	CONNECTED
PIN3 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN3 – K	A	K – Cathode	CONNECTED
PIN5 – G1	A	G1 – Control Grid	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – G2	A	G2 – Screen Grid	CONNECTED
CAP1 – P	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	7200 Ω
TRANSCONDUCTANCE	0.0074 S
MAXIMUM PLATE VOLTAGE	175 V
MAXIMUM SCREEN VOLTAGE	175 V
MAXIMUM PLATE DISSIPATION	15 W
MAXIMUM SCREEN DISSIPATION	5 W
<i>Published source values promoted where applicable.</i>	

The BRIMAR 50CD6G is a 50 V heater line time-base output valve for television service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	700 V	Published handbook rating
Maximum screen voltage	175 V	Published handbook rating
Plate voltage	60 V	ClassA
Screen voltage	100 V	ClassA
Control-grid bias	0 V	ClassA
Plate current	230 mA	ClassA
Screen current	21 mA	ClassA
Maximum positive pulse plate voltage	6600 V	HorizontalDeflection
Maximum plate dissipation	15 W	HorizontalDeflection
Maximum screen dissipation	3 W	HorizontalDeflection
Maximum DC cathode current	200 mA	HorizontalDeflection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	7200 ohm	Published handbook characteristic
Transconductance	7700 μ S	Published handbook characteristic
Heater/filament voltage	50 V	Published heater/filament rating
Heater/filament current	300 mA	Published heater/filament rating

TUBE TINKER

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

