

ELECTRONIC TUBE REFERENCE

34CE3

Rectifier - Damper Diode electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
RECTIFIER

High-voltage television damper diode for horizontal-deflection circuits, designed to conduct recovery current and withstand repetitive inverse sweep pulses.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12GK	BASE PINS	12
NOMINAL HEATER	34.6 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

12GK - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	H – Heater	CONNECTED
PIN2	–	–	IC
PIN3	–	–	IC
PIN4	–	P – Plate (Anode)	CONNECTED
PIN5	–	–	IC
PIN6	–	–	IC
PIN7	–	K – Cathode	CONNECTED
PIN8	–	–	IC
PIN9	–	–	IC
PIN10	–	P – Plate (Anode)	CONNECTED
PIN11	–	–	IC
PIN12	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
MAXIMUM PLATE DISSIPATION	11 W
PEAK INVERSE VOLTAGE	5000 V
NOMINAL OUTPUT CURRENT	350 mA
PEAK FORWARD CURRENT	1.5 A
FORWARD VOLTAGE DROP	20 V
MAXIMUM HEATER-CATHODE VOLTAGE	5600 V
WARM-UP TIME	11 s
TV damper.	

Duodecar half-wave vacuum rectifier used as a damper diode in the horizontal-deflection circuit of color television receivers.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Steady-State Peak Plate Current	1500 mA	TVDamper



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 RCA RC30

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

1975 RCA RC30

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc) 6.3	34.6 V	Published in approved 34CE3 target datasheet entry; Section1
Heater Current 2.6	450 mA	Published in approved 34CE3 target datasheet entry; Section1
Heater Warm-up Time (Average)	11 seconds	Published in approved 34CE3 target datasheet entry; Section1
Plate to Cathode and Heater	13 pF	Published in approved 34CE3 target datasheet entry; Section1
Cathode to Plate and Heater	18 pF	Published in approved 34CE3 target datasheet entry; Section1
Heater to Cathode	5.5 pF	Published in approved 34CE3 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Inverse Plate Voltage*	5000 V	Published in approved 34CE3 target datasheet entry; Section1
Peak Plate Current	1500 mA	Published in approved 34CE3 target datasheet entry; Section1
Average Plate Current	350 mA	Published in approved 34CE3 target datasheet entry; Section1
Plate Dissipation	11 W	Published in approved 34CE3 target datasheet entry; Section1
Bulb Temperature (At hottest point)	220 °C	Published in approved 34CE3 target datasheet entry; Section1
Peak value +300	5600 V	Published in approved 34CE3 target datasheet entry; Section1
Average value +100	-900 V	Published in approved 34CE3 target datasheet entry; Section1
Tube Voltage Drop for plate current of	680 mA	Published in approved 34CE3 target datasheet entry; Section1
Tube Voltage Drop for plate current of 680 mA	20 V	Published in approved 34CE3 target datasheet entry; Section1
# Pulse duration must not exceed 15% of a horizontal scanning cycle (	10 microseconds	Published in approved 34CE3 target datasheet entry; Section1
Heater Voltage (ac/dc) 6.3 19	25 V	Published in approved 34CE3 target datasheet entry; Section1
Heater Current 1.8 0.6	450 mA	Published in approved 34CE3 target datasheet entry; Section1
Heater Warm-up Time – 11	11 seconds	Published in approved 34CE3 target datasheet entry; Section1
Peak Plate Current	2100 mA	Published in approved 34CE3 target datasheet entry; Section1
Average Plate Current +300	350 mA	Published in approved 34CE3 target datasheet entry; Section1
Plate Dissipation	6.5 W	Published in approved 34CE3 target datasheet entry; Section1
Peak value	-5000 V	Published in approved 34CE3 target datasheet entry; Section1
Average value +100	900 V	Published in approved 34CE3 target datasheet entry; Section1
Tube VoltAge Drop for plate current of	700 mA	Published in approved 34CE3 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube VoigtAge Drop for plate current of 700 mA	25 V	Published in approved 34CE3 target datasheet entry; Section1

TUBE TINKER

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