



ELECTRONIC TUBE REFERENCE

A2087

Diode (NOT rectifier) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

DIODE

Calibrated VHF noise-generator diode designed as a receiver noise-factor measurement source at frequencies to approximately 220 MHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	4.3 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Diode	
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Directly heated tungsten-filament VHF noise-generator diode; anode is mapped to plate fields where semantically applicable.</i>	

The A2087 is a VHF noise-generator diode intended as a calibrated noise source for receiver noise-factor measurements at frequencies up to about 220 MHz.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1955 Marconi

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

1955 MARCONI

Section 1 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
TUNGSTEN FILAMENT ISSUE	2	TUNGSTEN FILAMENT ISSUE 2
With a [1]	6	With a 6-:3V filament supply, a variable series resistor of 10Q max. will be suitable for
With a [2]	3	With a 6-:3V filament supply, a variable series resistor of 10Q max. will be suitable for
With a [3]	10	With a 6-:3V filament supply, a variable series resistor of 10Q max. will be suitable for
*Includes capacitance to filament, pins [1]	2 pF	*Includes capacitance to filament, pins 2 & 7 and external shield.
*Includes capacitance to filament, pins [2]	7 pF	*Includes capacitance to filament, pins 2 & 7 and external shield.
Noise Diode for use up to	220 MHz	Noise Diode for use up to 220Mc/s
Then, noise factor = [1]	10	Then, noise factor = 10 logjo (20.Ia.Rs) dB,
Then, noise factor = [2]	20	Then, noise factor = 10 logjo (20.Ia.Rs) dB,
saturated current of SmA. With a saturated current of	20 mA	saturated current of SmA. With a saturated current of 20mA the life is approximately

SOURCE OPERATING CONDITIONS

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 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AnodeCurrentMax	20 mA	—
FilamentVoltageMax	4.8 V	—
Filament voltage range	0–4.3 V	—
Filament current (approx at Vf	4.3 V	—
Filament current (approx at Vf 4 3 V)	600 mA	—
voltage With a	6.3 V	—
Anode voltage	200 V	MAXIMUM RATINGS
Anode current	20 mA	MAXIMUM RATINGS
Anode dissipation	2 W	MAXIMUM RATINGS
Filament voltage	4.8 V	MAXIMUM RATINGS
Anode voltage	40 V	MAXIMUM RATINGS
Saturated anode current (approx)	7 mA	MAXIMUM RATINGS
Filament voltage (approx)	3.7 V	MAXIMUM RATINGS
Noise Diode for use up to	220 MHz	TYPICAL OPERATION
Anode voltage 100 100	100 V	TYPICAL OPERATION
Saturated anode current range 0-20 0-20	0–20 mA	TYPICAL OPERATION
Filament voltage range (approx) 0-4 3 0-4 3	0–4.3 V	TYPICAL OPERATION
range (approx) 0-13 0-14 5	0–20.8 dB	TYPICAL OPERATION
a saturated current of	5 mA	TYPICAL OPERATION
a saturated current of 5 mA With a saturated current of	20 mA	TYPICAL OPERATION
above is necessary for use up to	220 MHz	TYPICAL OPERATION

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AnodeVoltageCharacteristic	40 V	—
SaturatedAnodeCurrent	7 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode to fi lament (approx)	1.35 pF	CAPACITANCES (measured on a cold valve fitted with external
Anode to all (approx)	2.7 pF	CAPACITANCES (measured on a cold valve fitted with external

TUBE TINKER

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