

DATA FOR E.I.A. REGISTRATION

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MULLARD LIMITED,
Mullard House,
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JEDEC TYPE NO. 7635

TUBE TYPE BA9-20

The BA9-20 is a packaged backward wave oscillator for amplitude pulse or frequency modulation operation in the frequency range of 7.0 to 11.5 Gc/s with a power output of 20 to 180 mWatts.

MECHANICAL INFORMATION

Base	Medium shell giant 7 pin with bayonet J.E.T.E.C. A7-17
Envelope	Metal
Maximum overall length	10.275" (261mm)
Maximum overall diameter	3.9" (86.1mm)
Cathode	Indirectly heated
Mounting position	Any
Cooling	Natural

HEATER RATINGS

Heater voltage	6.3 Volts
Heater current	1.7 Amps
Heater warm-up time	60 Seconds

MAXIMUM RATINGS (absolute values)

Maximum delay structure voltage	1.4 kVolts
Minimum delay structure voltage	250 Volts
Maximum cathode current	28 mAmps
Maximum anode voltage	500 Volts
Maximum anode current	10 mAmps
Maximum positive grid voltage	0 Volts
Minimum distance from ferrous bodies	9 inches

CHARACTERISTICS

Frequency electronically tunable over the range	Min. 7.0	Max. 11.5	Go/s
Sensitivity over frequency band	2	10	Mo/s per Volt
Power output over frequency band	20	180	mWatts
Grid voltage for maximum output	-	0	Volts
Grid voltage for zero output	-	-100	Volts
Grid power for amplitude modulation	-	0	Watts

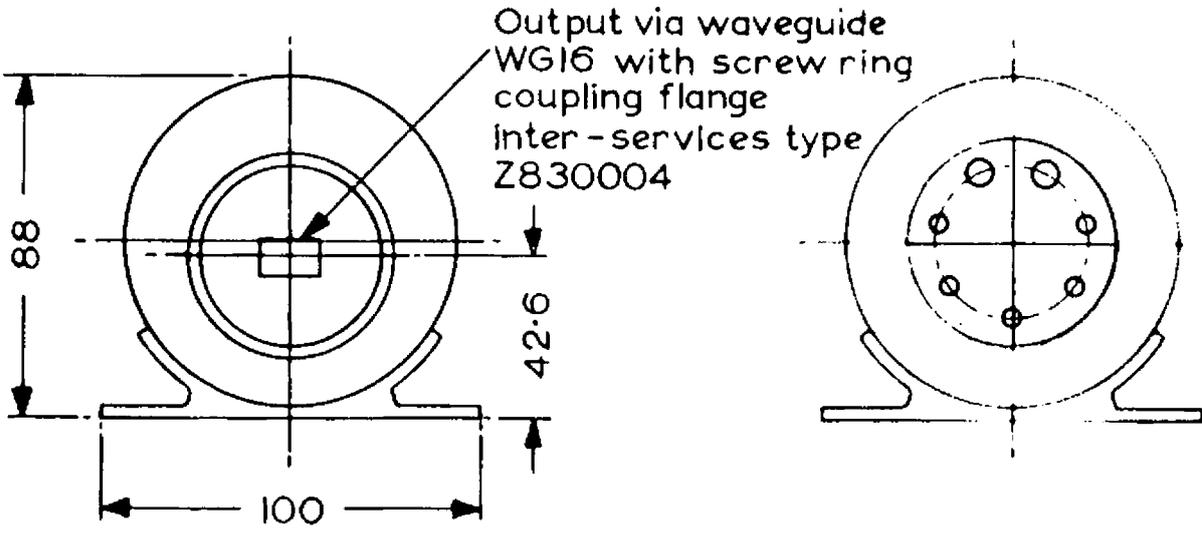
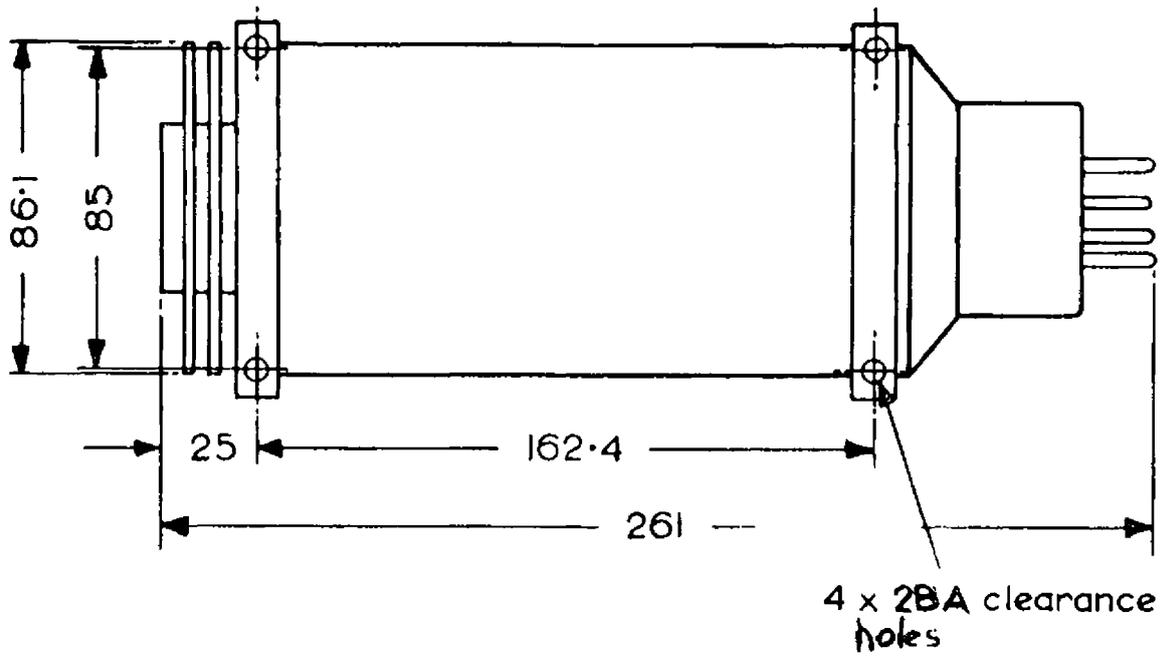
OPERATING CONDITIONS

Frequency	8.0	9.4	11	Go/s
Delay structure voltage	390	630	1,090	Volts
Delay structure current	20	21	22	mAmps
Anode voltage	350	350	350	Volts
Anode current	5	5	5	mAmps
Grid voltage	0	0	0	Volts
Power output	52	100	120	mWatts

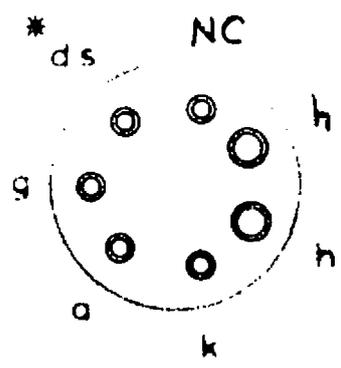
OPERATING NOTE

Electrode supplies must be connected in the following order and disconnected in the reverse order:-

1	2	3	4
heater	grid	delay	anode
		structure	



* delay structure



All dimensions in mm

B7D base