



3R/167E

16P13
WATER COOLED TRIODE
 Directly heated
TENTATIVE

GENERAL

The 16P13 is a directly heated Water Cooled Triode with integral cooling and union connectors. It is intended for use as an R.F. Oscillator in eddy current heating apparatus, etc. This valve is the water cooled version of the ESA1500 and is identical to the 16P12 except that it has unions attached to the ends of the water cooling tube. The thoriated tungsten filament is suitable for direct switching.

RATING

Filament Voltage	V_f	$8.0 \pm 5\%$	V
Filament Current	I_f	26	A
Maximum Anode Voltage (D.C.)	$V_a(\max)$	8	kV
Maximum Peak Cathode Current	$I_k(pk)\max$	6	A
Maximum Anode Dissipation	$P_a(\max)$	3.0	kW
Maximum Operating Frequency (Limited by water connections)	$f(\max)$	10	Mc/s
Maximum Operating Frequency (Limited by valve)	$f(\max)$	40	Mc/s

INTER-ELECTRODE CAPACITANCES (pF)

Anode/Grid	C_{a-g}	11.5
Anode/Filament	C_{a-f}	0.8
Grid/Filament	C_{g-f}	14.5

DIMENSIONS

Maximum Overall Length	211	mm
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UNION CONNECTORS—to suit $\frac{1}{4}$ " o.d. Tube to BS2051.

MOUNTING POSITION—Vertical with base up.



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CHARACTERISTICS

Anode Voltage	V_a	5	kV
Anode Current	I_a	400	mA
Mutual Conductance	g_m	7.5	mA/V
Amplification Factor	μ	24	

ANODE—External.

BASE—Special.

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