

EDISWAN**MAZDA****10F18**

VARIABLE MU H. F. PENTODE
Indirectly heated—for series operation

GENERAL

The 10F18 is a variable mu H.F. Pentode intended for use in AM/FM Receivers having series fed heaters and is suitable for use on AC/DC Mains.

RATING

Heater Voltage	(volts)	V_h	13.0
Heater Current	(amps)	I_h	0.1
Maximum Anode Voltage	(volts)	$V_a(\max)$	250
Maximum Screen Voltage	(volts)	$V_{g2}(\max)$	250
Maximum Anode Dissipation	(watts)	$P_a(\max)$	2.25
Maximum Screen Dissipation	(watts)	$P_{g2}(\max)$	0.5
Maximum Heater to Cathode Voltage	(volts r.m.s.)	$V_{h-k}(\max)$	150

INTER-ELECTRODE CAPACITANCES (pF)

		*	**
Control Grid to Earth	c_{in}	5.2	6.5
Anode to Earth	c_{out}	5.0	6.3
Control Grid to Anode	c_{a-g1}	0.0017	0.0021

Earth denotes the remaining earthy potential electrodes, heater and shields connected to cathode.

* Inter-electrode capacity with holder capacity balanced out but with cylindrical screen can.

** Total capacity including Carr Fastener holder type 76/804E/T with radial shield and cylindrical screen. The C_{g-a} holder capacity can be reduced to 0.00004 pF by the insertion of a shield between pins 4 and 5, 9 and 1. If an unscreened holder is used (without can or skirt) the total g_1 to a capacity with holder becomes 0.0025 pF.

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DIMENSIONS

Maximum Overall Length	(mm)	56.0
Maximum Diameter	(mm)	22.2
Maximum Seated Height	(mm)	49.0
Approximate Nett Weight	(ozs)	$\frac{1}{2}$
Approximate Packed Weight	(ozs)	$\frac{3}{4}$

MOUNTING POSITION—UnrestrictedTYPICAL OPERATION

Anode Voltage (volts)	V_a	175	175
Screen Voltage (volts)	V_{g2}	100	175
Grid Bias Voltage (volts)	V_{g1}	-1.3	
Anode Current (mA)	I_a	12.0	
Screen Current (mA)	I_{g2}	3.5	
Mutual Conductance (mA/V)	g_m	4.4	
Bias to give mutual conductance of 100 $\mu A/V$			-19.5
Anode Impedance ($k\Omega$)	r_a	220	
Input Capacity Working (Hot) (pF)	c_{in}	7.1	
Input Capacity Change at cut-off (pF)	Δc	1.7	
Input Loss at 38 Mc/s, cathode pins strapped ($k\Omega$)		16	

BULB—Clear

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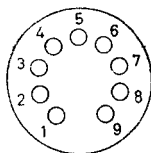
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BASE—Noval (B9A)



Viewed from free end of pins

CONNECTIONS

Pin 1	Cathode	k
Pin 2	Control Grid	g1
Pin 3	Cathode	k
Pin 4	Heater	h
Pin 5	Heater	h
Pin 6	Internal Shield	s
Pin 7	Anode	a
Pin 8	Screen Grid	g2
Pin 9	Suppressor Grid	g3

NOTE.—If only one cathode pin is required it is recommended that pin 3 be used.