EDISWAN

MAZDA

6F25

SCREENED VARIABLE MU H.F. PENTODE

Indirectly heated—for series or parallel operation

TENTATIVE

GENERAL

The 6F25 is an indirectly heated Screened Variable-μ-H.F. Pentode of Frame Grid construction. It is capable of handling large input signals without cross-modulation occurring, therefore it is very suitable for use as the common I.F. amplifier in AC or AC/DC television receivers.

RATING

Heater Voltage	V_h	6·3	V
Heater Current	I_h	0·3	A
Maximum Anode Voltage	$V_{a(max)}$	250	V
Maximum Screen Voltage	$V_{g2(max)}$	250	V
Maximum Anode Dissipation	$P_{a(max)}$	2·5	W
Maximum Screen Dissipation	$P_{g2(max)}$	0·5	W
Mutual Conductance	g_m	12·5*	mA/V
Inner Amplification Factor	$\mu_{g1\text{-}g2}$	35*	
Maximum Heater/Cathode Voltage r.m.s.	$V_{h\text{-}k(rms)max}$	150†	V
Maximum Control Grid/Cathode Resistance	$r_{g\text{-}k}$	1	MΩ

* At V_a=170V, V_{g2}=90V, I_a=11·5mA.

† From cathode to higher potential heater pin.

INTER-ELECTRODE CAPACITANCES (pF)††

Grid 1/Earth	c_{in}	8·5
Anode/Earth	c_{out}	2·7
Anode/Grid 1	$c_{a\text{-}g1}$	0·006
Grid 1/Grid 3	$c_{g1\text{-}g3}$	0·1
Grid 1/Grid 2	$c_{g1\text{-}g2}$	1·8
Grid 1/Cathode	$c_{g1\text{-}k}$	6·0
Anode/Grid 2	$c_{a\text{-}g2}$	0·19
Anode/Grid 3	$c_{a\text{-}g3}$	0·45

†† With fully shielded socket, without can.

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DIMENSIONS

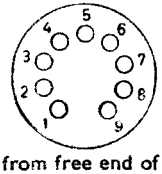
Maximum Overall Length	56	mm
Maximum Diameter	22·2	mm
Maximum Seated Height	49	mm

MOUNTING POSITION—Unrestricted

TYPICAL OPERATION

Supply Voltage	$V_{a(b)}$	200	V
Anode Voltage	V_a	170	V
Screen Voltage (Initial)	V_{g2}	90	V
Grid Bias Voltage (approx)	V_{g1}	—1·5	V
Anode Current	I_a	11·5	mA
Screen Current	I_{g2}	2·8	mA
Mutual Conductance	g_m	12·5	mA/V
Screen Resistance	R_{g2}	39	kΩ
Self Bias Resistance	R_k	100	Ω
Grid Voltage for Mutual Conductance Reduction 10 : 1	V_{g1}	—5·5	V

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

December, 1960 ADVANCE DATA

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