

EDISWAN

MAZDA

6F25

SCREENED VARIABLE MU H.F. PENTODE Indirectly heated—for series or parallel operation **TENTATIVE**

6F25

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	μ_{g1-g2}	35*	
Maximum Heater/Cathode Voltage r.m.s.	$V_{h-k}(\text{rms})_{\max}$	150†	V
Maximum Control Grid/Cathode Resistance	r_{g-k}	1	M Ω

* At $V_a=170\text{V}$, $V_{g2}=90\text{V}$, $I_a=11.5\text{mA}$.

† 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-g1}	0.006
Grid 1/Grid 3	C_{g1-g3}	0.1
Grid 1/Grid 2	C_{g1-g2}	1.8
Grid 1/Cathode	C_{g1-k}	6.0
Anode/Grid 2	C_{a-g2}	0.19
Anode/Grid 3	C_{a-g3}	0.45

†† With fully shielded socket, without can.

December, 1960

ADVANCE DATA

Associated Electrical Industries Limited

RADIO & ELECTRONIC COMPONENTS DIVISION

6F25

EDISWAN**MAZDA****6F25****SCREENED VARIABLE MU H.F. PENTODE**

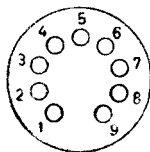
Indirectly heated—for series or parallel operation

TENTATIVE**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	k Ω
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

Associated Electrical Industries Limited

RADIO & ELECTRONIC COMPONENTS DIVISION