

TOKYO SHIBAURA ELECTRIC CO., LTD.
KAWASAKI JAPAN

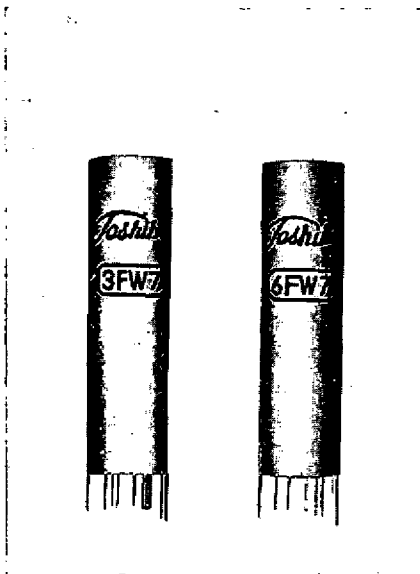
Toshiba

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REGISTRATION DATA

Type **3FW7, 6FW7**

Date issued **SEP. 1 1962**



Toshiba 3FW7, 6FW7 are 8 pin subminiature medium Mu dual triode with shield can having indexing legs.

They are designed especially for use as mixer oscillator in VHF TV and FM tuners.

The section 1 is intended to service as an oscillator and the section 2 as an mixer.

The 3FW7 is like the 6FW7 except that it has 3.5-volt/600-Milliampere heater for use in series string circuit.

GENERAL DATA

Electrical :

Heater, for unipotential cathode :	3FW7	6FW7	
Voltage (AC or DC)	3.5	6.3	volts
Current.....	600	300	ma
Heater warm up time.....	Approx. 11	—	sec
Direct interelectrode capacitance (with shield can) :	Unit 1	Unit 2	
Grid to plate: (g to p)	1.6	1.5	$\mu\mu f$
Input: g to (h+k+sd).....	2.6	3.0	$\mu\mu f$
Output: p to (h+k+sd)	1.8	1.4	$\mu\mu f$

Mechanical :

Operating position.....	Any
Maximum overall length	1.969"
Maximum diameter	0.512"
Bulb.....	T 3
Base	E8-9



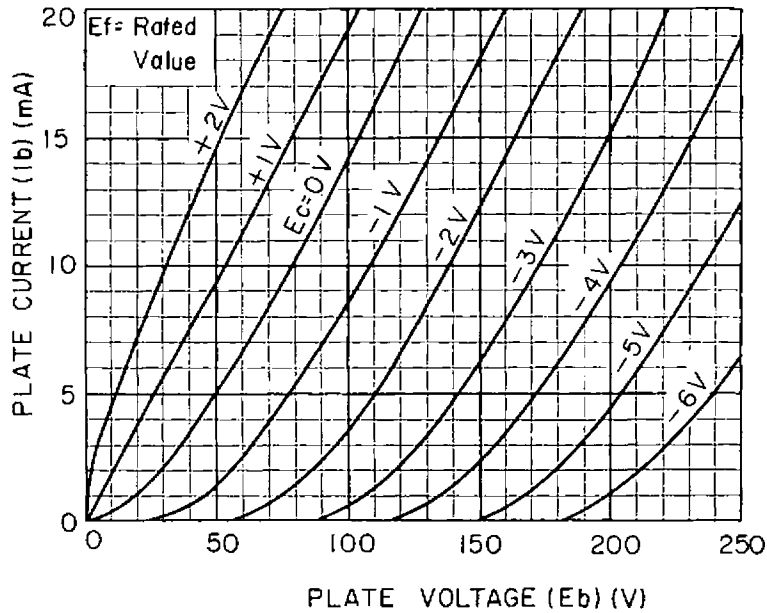
Maximum Ratings (Design Maximum Values): (Each Section)

Plate voltage (with cutoff bias)	300	volts
Plate voltage.....	150	volts
Cathode current	20	ma
Circuit Values: Grid circuit resistance (each section)	0.5	megohms
Heater-cathode voltage		
Heater negative with respect to cathode, DC	200	volts
Total, DC and peak	200	volts
Heater positive with respect to cathode, DC	100	volts
Total, DC and peak	200	volts

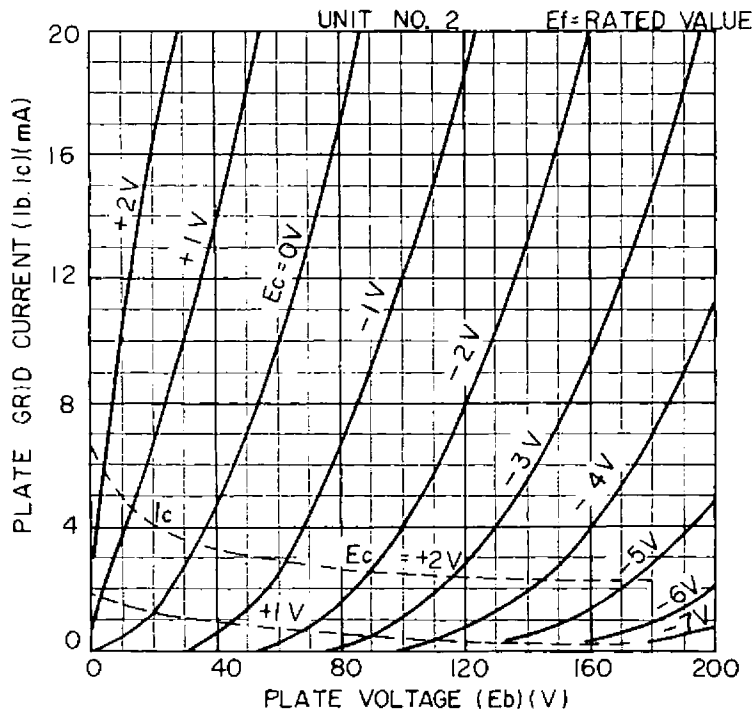
Typical Operating Conditions and Characteristics:

Class A1 Amplifier	Unit 1	Unit 2	
Plate voltage	90	90	volts
Grid voltage	-1	-1	volts
Amplification factor	36	36	
Plate resistance	6,000	3,800	ohms
Transconductance	6,000	9,500	μ mho
Plate current	7.0	9.0	ma

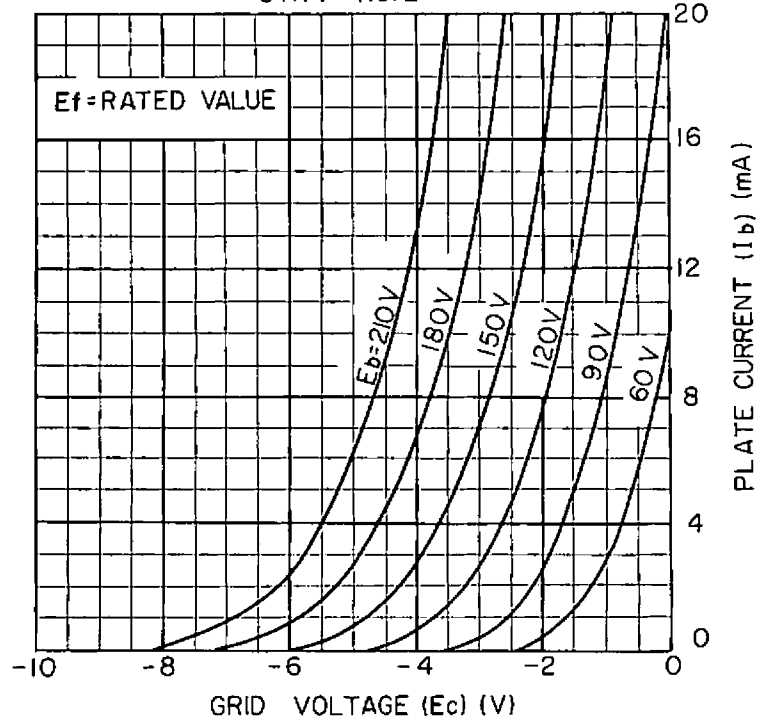
3FW7, 6FW7
AVERAGE CHARACTERISTICS
UNIT No. 1



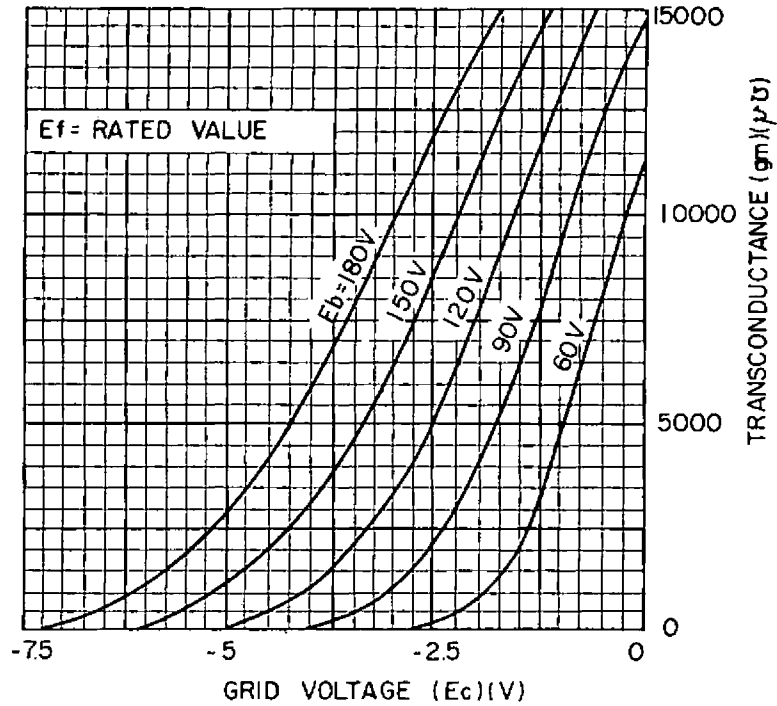
3FW7, 6FW7
AVERAGE PLATE CHARACTERISTICS



3FW7, 6FW7
AVERAGE PLATE CHARACTERISTICS
UNIT No.2



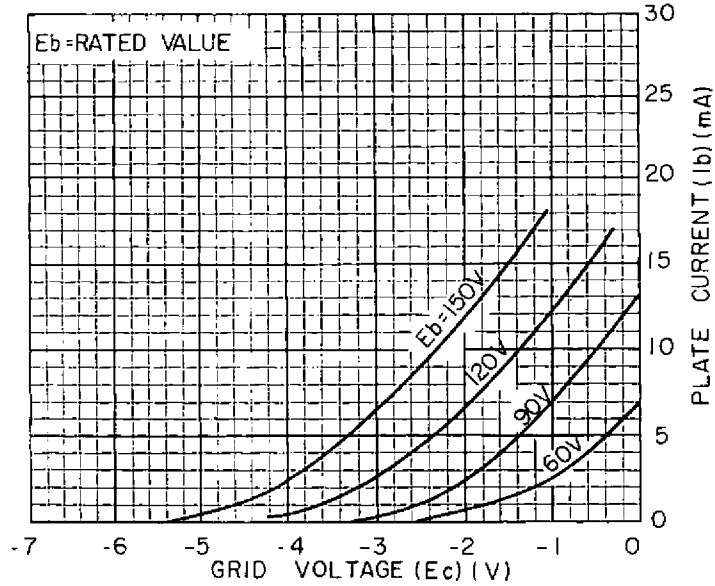
3FW7, 6FW7
AVERAGE CHARACTERISTICS
UNIT NO. 2



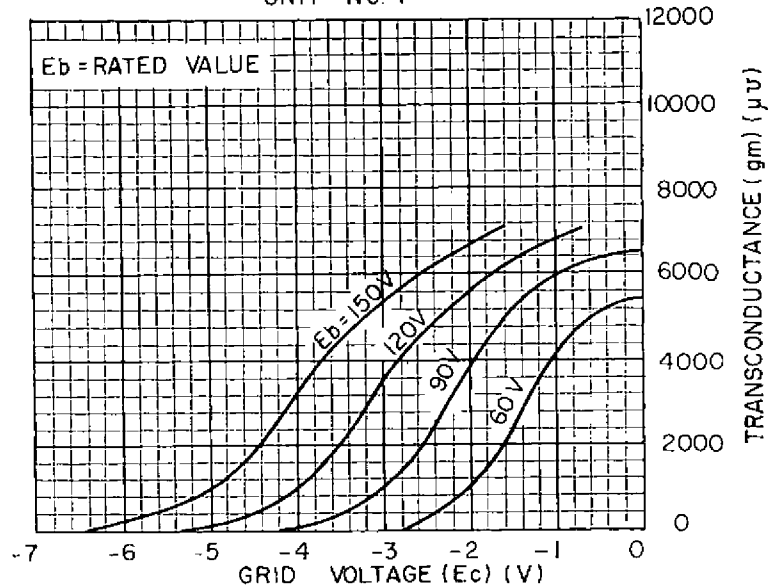


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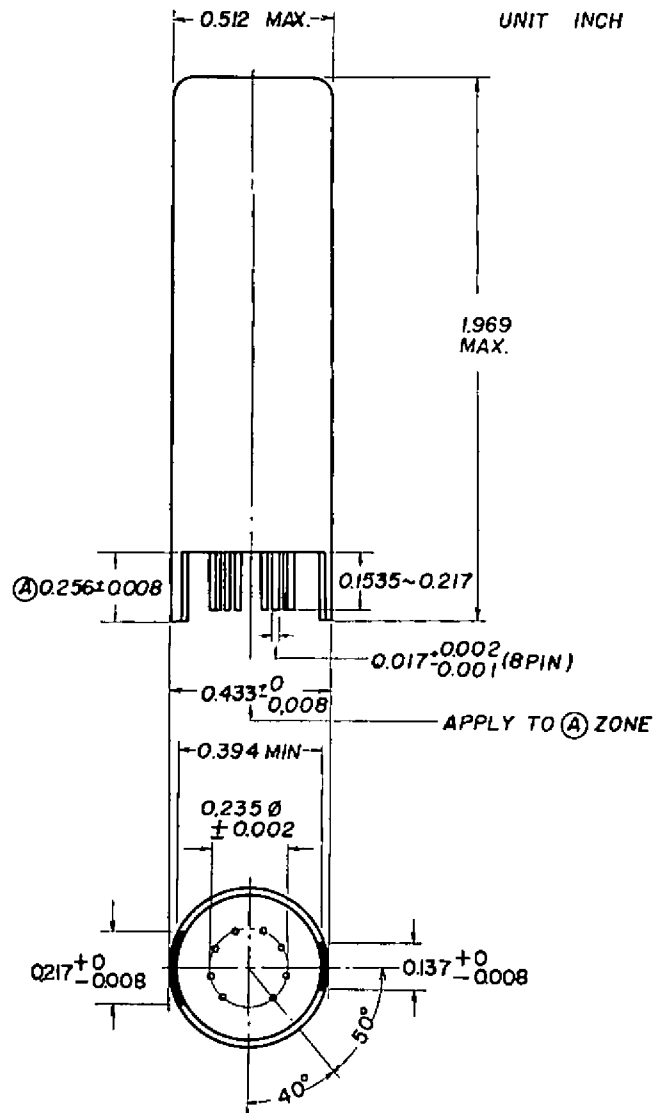
3FW7, 6FW7
AVERAGE CHARACTERISTICS
UNIT NO. 1



3FW7, 6FW7
AVERAGE CHARACTERISTICS
UNIT NO. 1

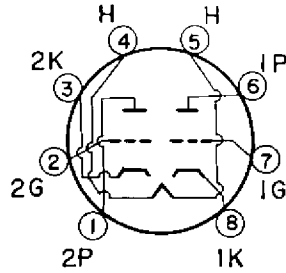


3FW7 6FW7
DIMENSIONAL OUTLINE



3FW7 6FW7
 SOCKET CONNECTIONS
 BOTTOM VIEW

PIN 1 Unit 2 Plate
 PIN 2 Unit 2 Grid
 PIN 3 Unit 2 Cathode
 PIN 4 Heater
 PIN 5 Heater



PIN 6 Unit 1 Plate
 PIN 7 Unit 1 Grid
 PIN 8 Unit 1 Cathode

8LM

Toshiba

All inquiries as to the data should be addressed to Tokyo Shibaura Electric Co., Ltd., Lamp and Tube Manufacturing and Sales Division, 72 Horikawacho, Kawasaki, Kanagawa-ken, Japan.