



12SW7

# DUPLEX-DIODE TRIODE

For use with 12-cell storage-battery supply

12SW7

## GENERAL DATA

### Electrical:

#### Heater, for Unipotential Cathode:

Voltage . . . . .	12.6	ac or dc volts
Current . . . . .	0.15	amp.

#### Direct Interelectrode Capacitances-Triode Unit:<sup>o</sup>

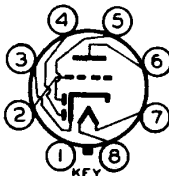
Grid to Plate . . . . .	2.4	μmf
Grid to Cathode . . . . .	3.0	μmf
Plate to Cathode . . . . .	2.8	μmf

### Mechanical:

Mounting Position . . . . .	Any
Maximum Overall Length . . . . .	2-5/8"
Maximum Seated Length . . . . .	2-1/16"
Maximum Diameter . . . . .	1-5/16"
Bulb . . . . .	Metal Shell, MT8G
Base . . . . .	Small Wafer Octal 8-Pin

Basing Designation for BOTTOM VIEW . . . . . 8Q

Pin 1 - Shell  
 Pin 2 - Triode Grid  
 Pin 3 - Cathode  
 Pin 4 - Diode Plate  
 No. 2



Pin 5 - Diode Plate  
 No. 1  
 Pin 6 - Triode Plate  
 Pin 7 - Heater  
 Pin 8 - Heater

## CLASS A<sub>1</sub> AMPLIFIER

### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE . . . . .	250 max. volts
PLATE DISSIPATION . . . . .	2.5 max. watts
PEAK HEATER-CATHODE VOLTAGE:	
Heater negative with respect to cathode . . . . .	90 max. volts
Heater positive with respect to cathode . . . . .	90 max. volts

### Characteristics:

Plate Voltage . . . . .	26.5	250 . . volts
Grid Voltage:		
From a fixed supply of . . . . .	-	-9 . . volts
From a grid resistor of . . . . .	2	- . . megohms
Amplification Factor . . . . .	17	16
Plate Resistance . . . . .	15500	8500 . . ohms
Transconductance . . . . .	1100	1900 . . μmhos
Plate Current . . . . .	1.1	9.5 . . ma.

### Typical Operation with Resistance Coupling:

See RESISTANCE-COUPLED AMPLIFIER CHART, Type 6R7.

<sup>o</sup> with shell connected to cathode. Values are approximate.

JUNE 20, 1946

TUBE DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

12SW7



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DIODE UNITS - Two

The two diode plates are placed around a cathode, the sleeve of which is common to the triode unit. Each diode plate has its own base pin. Diode curves in the front of the RECEIVING TUBE SECTION apply to the 12SW7.

*Additional curves applying to the 12SW7  
are show. under Types 6R7, and 6SR7*

*CURVES UNDER TYPE 26C6  
ALSO APPLY TO THE 12SW7*

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