

# DRIVER TRANSFORMERS

TO DETERMINE THE PRIMARY TO SECONDARY TURNS RATIO REQUIRED OF A DRIVER TRANSFORMER IN A CLASS B OR AB SERVICE, USE THE FOLLOWING FORMULA:

$$\text{Transformer Ratio} = \frac{\sqrt{PZ}}{0.35E}$$

Primary to 1/2 Secondary

P = Driving power in watts for following stage.  
Z = Plate load impedance of driver stage.  
E = Peak grid to grid signal voltage required for following stage.

Select driver tubes capable of delivering 1.5 times the grid driving power requirements of the following stages. Inverse feedback should be used with Pentode and Tetrode Drivers. Factor values for the above formula may be found in any tube manual.

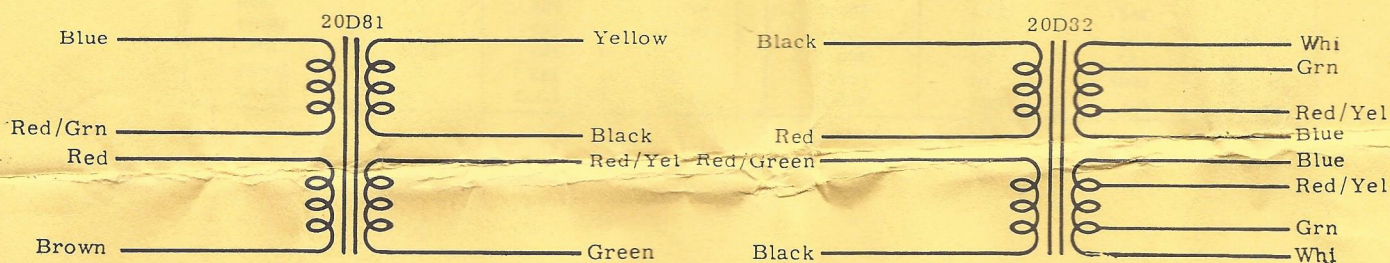
## Single Plate to Push-Pull Grids

Part No.	Primary Ratio to 1/2 Secondary	Max. M. A. D. C.	Color Code		
			Primary	Secondary	Secondary C. T.
20D75	2.4:1	10	Red-Blue	Grn-Yellow	Black
20D86	2.5:1	3	Red-Blue	Grn-Yellow	Black
20D77	2.5:1	30	Red-Blue	Grn-Yellow	Black
20D76	5.2:1	15	Red-Blue	Grn-Yellow	Black

## Single or Push-Pull Plates to Push-Pull Grids

Part No.	Primary Ratio To 1/2 Secondary	Max. M. A. D. C.	Color Code			
			Primary	Primary C. T.	Secondary	Secondary C. T.
20D85	3:1	10	Blue-Blue	Red	Green-Green	Black
20D80	3.2:1	100	Blue-Brn	Red	Grn-Yel	Black
	2:1		Red/Blk-Blue/Whi	Red	Grn-Yel	Black
20D82*	3.2:1	100	Red-Red/Grn	Black-Black	Whi-Whi	Blue & Blue
	4:1		Red-Red/Grn	Black-Black	Grn-Grn	Blue & Blue
	5:1		Red-Red/Grn	Black-Black	Red/Yel-Red/Yel	Blue & Blue
20D78	4:1	40	Blue-Brn	Red	Grn-Yel	Black
20D81*	5:1	100	Blue-Brn	Red & Red/Grn	Grn-Yel	Black & Red/Yel
20D87	5.2:1	30	Blue-Brn	Red	Grn-Yel	Black
20D79	5.2:1	30	Blue-Brn	Red	Grn-Yel	Black

\*Has split windings for balancing and/or inverse feedback applications.



SEE REVERSE SIDE FOR DRIVER TRANSFORMER CHART

SD-20D75A

*analysis*



## Driver Transformer Chart

Tubes of similar characteristics may be substituted in either the driver or modulator column without any change in transformer recommendations.

For Driver transformers that are to be used in conjunction with a 500 or 125 ohm line use 20D83 and 20D84.

P-P Modulator Tubes	P-P Driver Tubes	Trans. Ratio Pri. to 1/2 Sec.	Use Driver Trans. No.	P-P Modulator Tubes	P-P Driver Tubes	Trans. Ratio Pri. to 1/2 Sec.	Use Driver Trans. No.
<b>RCA</b>				203B	2A3	2:1	20D80
4-125	1-6B4G	2.5:1	20D86	4-203B	6L6	3.2:1	20D80
203A	2A3	2:1	20D80	203Z	2A3	5:1	20D82
202A	6L6	3.2:1	20D80	T-756	2A3	3.2:1	20D85
4-203A	6L6	3.2:1	20D80	T-814	6L6	2:1	20D80
4-203A	4-2A3	2:1	20D80	<b>Raytheon</b>			
211	2A3	2:1	20D80	RK-12	2A3	5:1	20D81
4-250	6V6	2.5:1	20D77	RK-18	6B4	3.2:1	20D82
800	2A3	3.2:1	20D80	RK-18	2A3	4:1	20D82
801	2A3	3.2:1	20D80	RK-31	6B4	4:1	20D82
801	6SN7	3.2:1	20D80	RK-31	2A3	5:1	20D81
805	2A3	3.2:1	20D82	RK-52	2A3	4:1	20D82
806	4-2A3	2:1	20D80	RK-57	2A3	3.2:1	20D80
806	6L6	2:1	20D80	RK-58	2A3	4:1	20D82
807	6SN7	2.5:1	20D77	<b>Hytron</b>			
808	2A3	3.2:1	20D80	HY-25	6SN7	5:2	20D87
809	2A3	5:1	20D82	HY-40	2A3	3.2:1	20D80
809	6SN7	3:1	20D85	HY-57	2A3	5:2	20D87
810	4-2A3	3.2:1	20D82	HY-51A	2A3	4:1	20D78
811	6SN7	3:1	20D85	HY-51B	2A3	4:1	20D78
811	2A3	5:1	20D82	<b>Amperex</b>			
813	1-6SN7	3:1	20D85	HF-100	2A3	3.2:1	20D80
838	2A3	4:1	20D82	ZB-120	2A3	4:1	20D78
838	6SN7	5:1	20D81	ZB-120	2A3	3:1	20D85
4-838	4-2A3	3.2:1	20D82	HF-200	6L6	2:1	20D80
4-838	6L6	4:1	20D78	HF-200	2A3	3.2:1	20D80
<b>Taylor</b>				<b>Heintz &amp; Kaufman</b>			
T-20	6B4	3:1	20D85	HK-24	2A3	5:1	20D81
T-20	6B4	3:1	20D85	HK-24	2A3	3.2:1	20D82
TZ-20	6B4	3.2:1	20D85	HK-54	2A3	3.2:1	20D80
TZ-40	2A3	4:1	20D78	HK-154	2A3	2:1	20D80
TZ-40	6SN7	3.2:1	20D85	HK-254	2A3	2:1	20D80
T-55	2A3	3.2:1	20D80	HK-354	2A3	3.2:1	20D85
HD-203A	2A3	3.2:1	20D80	HK-354	2A3	2:1	20D80
HD-203A	2A3	2:1	20D80	354F	4-2A3	3.2:1	20D80
HD-203A	6SN7	2:1	20D80				
HD-203A	6L6	3.2:1	20D80				

SD-20D75A