

# ROGERS TUBE CHARACTERISTICS CHART

TYPE	CLASS	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8	CAP	R <sub>p</sub> (Ω)	S <sub>m</sub> <i>amp/v</i>	Z <sub>p</sub> (Ω)	P <sub>watts</sub> <sub>out</sub>	G <sub>cp</sub> <sub>out</sub>	NOTES	SUBS
6A7M	Pentagrid Converter	S Shell Ground	H 6.3 V 0.3 A	P 250 V 4 MA	G <sub>3,5</sub> 100 V Screen	G <sub>1</sub> 0.5 MA OSC	G <sub>2</sub> 100 V 3.5 MA OSC	H 6.3 V 0.3 A	K 0 V	G <sub>4</sub> -3 V Control	360,000	-	-	-	0.5	Conversion Conductance 520 micromhos. Similar to Type 6A7.	6K8G
6B7M	Duo Diode Pentode	S Shell Ground	H 6.3 V 0.3 A	P 250 V 6 MA	G <sub>2</sub> 100 V 1.5 MA	D <sub>1</sub> RF Diode	D <sub>2</sub> RF Diode	H 6.3 V 0.3 A	KG <sub>3</sub> 0 V	G <sub>1</sub> -3 V Control	800,000	1.0	-	-	0.004	Similar to Type 6B7. Supplied through 0.5 Meg. Res.* *Requires socket rewired *	*6B8
6F5M	High Mu Triode	S Shell Ground	H 6.3 V 0.3 A	-	P 250 V 0.9 MA	-	-	H 6.3 V 0.3 A	K 0 V	G <sub>1</sub> -2 V Control	66,000	1.5	500,000	-	2.0	Mu = 100	6F5
6F6M	Power Pentode	S Shell Ground	H 6.3 V 0.7 A	P 250 V 34 MA	G <sub>2</sub> 350 V 6.5 MA	G <sub>1</sub> -16.5 V Control	-	H 6.3 V 0.7 A	KG <sub>3</sub> 0 V	-	100,000	2.2	7,000	3.0	-	Similar to Type 42.	6F6G
6F7M	Triode Pentode	S Shell Ground	H 6.3 V 0.3 A	P 250 V 6.5 MA	G <sub>2</sub> 100 V Screen	P <sub>r</sub> 100 V 1.5 MA	G <sub>m</sub> -3 V T.Cont.	H 6.3 V 0.3 A	KG <sub>2</sub> 0 V	G <sub>1</sub> -3 V P.Cont.	π 17,800 P850,000	π 0.45 P 1.1	-	-	P 0.004	Conversion Conductance 250 micromhos. Similar to Type 6F7. *Requires socket rewired *	*6P7G
6H7M	Power Pentode High Mu Triode	S Shell Ground	H 6.3 V 0.55A	P 250 V 32 MA	G <sub>2</sub> 250 V 6 MA	G <sub>1</sub> -18 V Control	P <sub>r</sub> See Note	J 6.3 V 0.55A	KG <sub>3</sub> 0 V	G <sub>m</sub> -1.2 V T Control	70,000	2.2	7,600	3.4	-	Triode Plate Voltage 250 V supplied through 0.5 Meg. Res. Similar to Type 6H7	6K7G
6K7M	Super Control R. F. Pentode	S Shell Ground	H 6.3 V 0.3 A	P 250 V 8.2 MA	G <sub>2</sub> 100 V Screen	G <sub>3</sub> 0 V Sup.	-	H 6.3 V 0.3 A	K 0 V	G <sub>1</sub> -3 V Control	900,000	1.4	-	-	0.01	Logarithmic Control Grid. Similar to Type 78.	6K7G
41M	Power Pentode	S Shell Ground	H 6.3 V 0.4 A	P 250 V 32 MA	G <sub>2</sub> 250 V 6 MA	G <sub>1</sub> -18 V Control	-	H 6.3 V 0.4 A	KG <sub>3</sub> 0 V	-	70,000	2.2	7,600	3.4	-	Similar to Type 41.	6K6G
75M 6B6M	Duo Diode High Mu Triode	S Shell Ground	H 6.3 V 0.3 A	P 250 V 0.4 MA	D <sub>1</sub> RF Diode	D <sub>2</sub> RF Diode	-	H 6.3 V 0.3 A	K 0 V	G <sub>1</sub> -1.35 V Control	-	-	-	-	-	Mu = 100; Gain 50 to 60 per stage. Similar to Type 75	6Q7
77M	R.F. Pentode	S Shell Ground	H 6.3 V 0.3 A	P 250 V 2 MA	G <sub>2</sub> 100 V Screen	G <sub>3</sub> 0 V Sup.	-	H 6.3 V 0.3 A	K 0 V	G <sub>1</sub> -3 V Control	1,500,000	1.2	-	-	0.1	Similar to Type 77.	6J7G
85M	Duo Diode Triode	S Shell Ground	H 6.3 V 0.3 A	P 250 V 8 MA	D <sub>1</sub> RF Diode	D <sub>2</sub> RF Diode	-	H 6.3 V 0.3 A	K 0 V	G <sub>1</sub> -20 V Control	7,500	1.1	20,000	.35	1.5	Mu = 8.2; Similar to Type 85	6V7G
86M	Triode	S Shell Ground	H 6.3 V 0.3 A	P 250 V 5 MA	-	G <sub>1</sub> -13.5 V Control	-	H 6.3 V 0.3 A	K 0 V	-	9,500	1.4	-	-	3.2	Similar to Type 86.	6P5G
88M	Super Control R.F. Pentode	S Shell Ground	H 6.3 V 0.4 A	P 250 V 8.2MA	G <sub>2</sub> 100 V Screen	G <sub>3</sub> 0 V Sup.	-	H 6.3 V 0.4 A	K 0 V	G <sub>1</sub> -3 V Control	800,000	1.6	-	-	0.01	Logarithmic Control Grid. Similar to Type 88.	6K7G

**NOTE: THE "W" SERIES RADIO TUBES HAVE AN OCTAL SHELL BASE (8 CONTACT PINS WITH DOWEL LOCATOR PIN)**  
 THE "M" SERIES ARE ALL METAL SPRAY SHIELDED WITH CONTACT TO PIN NO. 1 WHICH SERVES TO GROUND THE METAL SHELL  
 PIN NO. 1 OF THE OCTAL SHELL BASE IS THE FIRST PIN, LOOKING AT THE BOTTOM OF THE BASE, READ CLOCKWISE FROM  
 THE KEYWAY OF THE DOWEL LOCATOR PIN. PIN NO. 2 IS THE NEXT PIN READ CLOCKWISE FROM PIN NO. 1.

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TYPE	CLASS	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8	CAP	R <sub>p</sub> (Ω)	S <sub>m</sub> mA/v	Z <sub>p</sub> (Ω)	P <sub>watts out</sub>	G <sub>CP</sub> unit	NOTES	SUBS
6G7S 89RS	Self-Rectifying Power Pentode	Kr G2 225 V	P +225 V 30 MA	H 6.3 V 1.0 A	H 6.3 V 1.0 A	Pr1 +250 V R.M.S.	G3 Kp 0 V	Pr2 250 V R.M.S.		G5 -16.5 V Control	70,000	1.8	7,000	2.5		For Type 89RS Max D.C. Rectifier Current - 80 MA	
6H7S	Power Pentode High Mu Triode	G2 +250 V 6 MA	P +250 V 32 MA	H 6.3 V 0.5 A	H 6.3 V 0.5 A	K 0 V	Pt 250 V .05 MA	G1 -18 V Control		Gt -1.2 V Control	70,000	2.2	7,600	3.4		Triode Plate Volt, supplied through 0.5 Megohm Res.	
86 86S	Triode	G1 -13.5 Control	P +250 V 5 MA	H 6.3 V 0.3 A	H 6.3 V 0.3 A	K 0 V					9,500	1.5			2.8	(Similar to 56-56S)	
R20	Amplifier Triode	G1 -15 V Control	P +180 V 20 MA		K 0 V					H H 2.8 V 1.6 A	3,000	2.0	4,800	0.32			
R30	Triode	G1 -5 V Control	P +90 V 3.6MA	H 2.8 V 1.0 A	H H 2.8 V 1.0 A	K 0 V					10,000	1.0			4.35		27
R32	Triode	G1 -5 V Control	P +90 V 3.6 MA		K 0 V					H H 2.8 V 1.0 A	10,000	1.0			4.35		
R100	Half Wave Rectifier		P 250 V R.M.S.	F 5.0 V .75 A	F 5.0 V .75 A											Max D.C. Load = 75 MA.	
R200	Half Wave Rectifier		P 250 V R.M.S.	F 5.0 V 1.1 A	F 5.0 V 1.1 A											Max D.C. Load = 75 MA.	

Biasing is indicated by Pin Numbers. Pins 3-4 are larger than the other - Pins, except in 5 prong base, where they are the two Pins opposite the spaced pin. Looking at the bottom of the base, and reading in a counter clock-wise direction, Pins 3 and 4 will serve to identify the other pins.

**CODE: K—Cathode**  
 G1—Grid next to Cathode  
 G2— " " " " " " G1  
 G3— " " " " " " G2  
 G4— " " " " " " G3  
 G5— " " " " " " G4

**P—Plate**  
 D—Diode  
 H—Heater  
 F—Filament  
 S after type number—Full Spray Shield

**Rp**—Variational Plate Resistance  
**Sm**—Transconductance ΔIp/ΔEg  
**Zp**—Optimum External Plate Load  
**Pout**—Power Output  
**Gcp**—Feedback Capacitance

NOTE—where tube type shows only an S after number - then tube can only be supplied with Spray Shield