UNITED ELECTRONICS

DIRECT REPLACEMENT GUIDE AND INTERCHANGEABILITY CHART

List of Other Make Tubes with Correct UNITED Replacement

Replace Old Tube	with	UNITED New Tube
BW-11	>	834
FG-17	>	967
FG-27	>	973
UH-50	>	834
HY-51-A	>	UX-CV11
T-55	>	V-70-D
RK-57	>	805
RK-58	>	838
HF-120	>	311-T
T-125	>	FV-20
HF-140	>	311-T
HF-150	>	311-CH
NU-150	>	311-CH
FP-195	>	952
WL-195	>	952
FP-197	>	311-T
C-200	>	HV-18
HF-200	>	HV-18
NU-200	>	HV-18
T-200	>	HV-18
HD-203C	>	303-U
203-H	>	303-U
203-U	>	303-U
WE 205-D	>	305-D
WL211	>	311-T
211-B	>	311-T
HD-211-C	>	311-CH
211-D	>	311-T
211-H	>	311-CH
211-HD	>	311-CH
FP-252A	>	FV-20
FP-285	>	311-CT
C-300	>	KU-23
DR-300	>	KU-23
HF-300	>	KU-23
NU-300	>	KU-23
303A	>	203-A
303C	>	303-U
304-A	>	204-A
304-B	>	834
311	>	211
312-E	>	212-E
342-A	>	242-A
342-B	>	242-B
361-A	>	261-A
375-A	>	975-A
376-A	>	276-A
384-D	>	284-D
C-455	>	830
WL-460	>	HV-18
WL-463	>	KU-23
WL-469	>	311-T
WL-471	>	311-CH
575A	>	975-A
801A/801	>	310
814(T)	>	HV-12
T-822	>	HV-27
T-841S-W	>	UX-CV11
849-A	>	949-A
849-H	>	949-H
852	>	952
866	>	866-A
905	>	805
930	>	830
930-B	>	830-B
938	>	838
945	>	845
949	>	849
951	>	851
966	>	866-A
966-A	>	866-A
972	>	872
972-A	>	872-A
1276	>	305-D
3572	>	866-A
3581	>	HV-27
3593	>	HV-12

UNITED ELECTRONICS

High Vacuum Tubes (OSCILLATORS MODULATORS AMPLIFIERS)

STATIC CHARACTERISTICS AND CONTINUOUS SERVICE RATINGS

INTERMITTENT SERVICE RATINGS DIATHERMY, R.F. HEATING, ETC.

UNITED TYPE	Class	Max. Plate Dissipation Watts	Filament		Maximum DC Plate Volts		Maximum DC Plate Current		Max. DC Grid Current (Ma.)	Amp. Factor (μ)	Inter-Electrode Capacitances			RP Ohms	Principal Purpose and Function	Maximum Plate			Approx. Output per Tube (Watts)
			Volts	Amps.	Modulated	Un-Modulated	Modulated	Un-Modulated			G-P μμfd	G-F μμfd	F-P μμfd			Meters	A C Volts	D C Volts	
CV-11	Triode	75	10.0	2.5	....	1500	....	.165	.025	14	9.0	5.0	2.3	3220	Diathermy	15 10 7.5 6	1500 1400 1300 1250	1350 1250 1150 1100	170 140 100 90
UX-CV-11	Triode	75	10.0	2.5	....	1500	....	165	.025	14	9.0	5.0	2.3	3220	Diathermy	15 10 7.5 6	1500 1400 1300 1250	1350 1250 1150 1100	170 140 100 90
HV-12	Triode	200	10.0	4.0	2000	2500	.175	.210	.060	12	14.0	8.5	4.0	2000	Diathermy Amplifier Class B Modulator	15 10 7.5 6	2250 2000 1800 1750	2000 1750 1600 1500	300 250 200 160
HV-18	Triode	200	10.0	3.85	2000	2500	.175	.210	.060	18	6.5	5.0	1.5	3600	Diathermy HF Heating Amplifier Class B Modulator	15 10 7.5 6	2800 2500 2500 2400	2500 2250 2250 2000	325 300 275 250
JV-19	Triode	150	10.0	4.0	.....	2500	....	.200	....	18	5.8	....	....	....	Diathermy	15 10 7.5 6			
FV-20	Triode	150	10.0	3.75	1750	1500	.175	.200	.060	20	6.8	5.1	3.5	5000	Diathermy Amplifier Class B Modulator	15 10 7.5 6	2000 1800 1700 1600	1750 1500 1400 1300	260 220 200 190
KU-23	Triode	200	11.0	4.0	2200	3000	.275	.275	.060	23	6.5	6.0	1.4	4100	HF Heating Oscillator Amplifier Class B Modulator				
HV-27	Triode	200	10.0	4.0	2000	2500	.175	.210	.060	27	14.5	8.5	3.5	4000	Diathermy Oscillator Amplifier Class B Modulator	15 10 7.5 6	2250 2000 1800 1750	2000 1750 1600 1500	300 250 200 160
V-70-D	Triode	70	7.5	3.25	.....	1500	....	.165	.025	28	4.5	4.5	1.7	7200	Diathermy	15 10 7.5 6	1500 1400 1300 1250	1350 1250 1150 1100	160 140 130 110
203-A	Triode	100	10.0	3.25	1000	1250	.150	.175	.060	25	14.5	6.5	5.5	6000	Oscillator Amplifier Class B Modulator				
204-A	Triode	250	11.0	3.85	2000	2500	.275	.275	.080	23	15.0	12.5	2.3	6300	Oscillator Amplifier Class B Modulator				
211	Triode	100	10.0	3.25	1000	1250	.150	.175	.050	12	14.5	6.0	5.5	3400	Oscillator Amplifier Modulator				
211-C	Triode	100	10.0	3.25	1000	1250	.150	.175	.050	12	9.0	6.0	5.0	3400	Oscillator Amplifier Modulator				
212-E	Triode	350	14.0	6.0	1500	3000	.325	.350	.125	16	18.8	14.9	8.6	1900	Oscillator Amplifier Modulator				
242-B	Triode	85	10.0	3.25	1000	1250	.040	.060	....	12	14.5	6.0	5.5	3400	Oscillator Amplifier Class A Modulator				
261-A	Triode	100	10.0	3.25	1000	1250	.150	.175	.050	12	9.0	6.0	5.0	3400	Oscillator Amplifier Modulator				
276-A	Triode	100	10.0	3.25	1000	1250	.150	.175	.050	12	9.0	6.0	5.0	3400	Oscillator Amplifier Modulator				
284-D	Triode	100	10.0	3.25	1000	1250	.150	.175	.050	48	8.3	6.0	5.6	1900	Oscillator Amplifier Modulator				

High Vacuum Tubes (Cont'd) (OSCILLATORS MODULATORS AMPLIFIERS)

STATIC CHARACTERISTICS AND CONTINUOUS SERVICE RATINGS

INTERMITTENT SERVICE RATINGS DIATHERMY, R.F. HEATING, ETC.

UNITED TYPE	Class	Max. Plate Dissipation Watts	Filament		Maximum DC Plate Volts		Maximum DC Plate Current		Max. D C Grid Current (Ma.)	Amp. Factor (μ)	Inter-Electrode Capacitances			RP Ohms	Principal Purpose and Function	Intermittent Service Ratings: Meters	Maximum Plate: AC Volts	Maximum Plate: DC Volts	Approx. Output per Tube (Watts)
			Volts	Amps.	Modulated	Un-Modulated	Modulated	Un-Modulated			G-P μμfd	G-F μμfd	F-P μμfd						
303U	Triode	125	10.0	3.75	....	....	....	.200	.060	21	9.0	7.0	4.0	4200	Diathermy	15 10 7.5 6	1800 1700 1600 1550	1500 1400 1300 1250	250 210 190 175
305-D	Triode	14	4.5	1.60	350	375	.040	.050	.010	7	4.8	5.2	3.3	4450	Oscillator Amplifier Modulator				
310	Triode	20	7.5	1.25	500	600	.060	.070	.015	8	7.0	4.0	2.2	5000	Oscillator Amplifier Modulator				
311-CH	Triode	125	10.0	3.25	....	1800	....	.200	.050	12	8.0	5.5	4.5	2550	Diathermy	15 10 7.5 6	1800 1700 1600 1550	1500 1400 1300 1250	250 210 190 175
311-CT	Triode	120	10.0	3.25	....	1500	....	.200	.050	12	8.0	5.5	4.0	2550	Diathermy	15 10 7.5 6	1500 1400 1400 1400	1350 1250 1250 1250	200 190 170 140
311-T	Triode	100	10.0	3.25	....	1500	....	.200	.050	12	13.0	6.0	5.0	2550	Diathermy	15 10 7.5 6	1500 1400 1400 1300	1350 1250 1250 1150	200 190 170 130
805	Triode	125	10.0	3.25	1250	1500	.175	.210	.070	100	6.5	8.5	10.5	12500	Oscillator Amplifier Class B Modulator				
813	Beam Tetrode	100	10.0	5.0	2000	2000	.100	.180	.025	100	0.2	16.3	14.0	27000	R. F. Amplifier				
830	Triode	40	10.0	2.0	....	800	....	.110	.018	8	9.9	4.9	2.2	4000	Diathermy	15 800 600 55 This type is not recommended for operation below 15 meters			
830-B	Triode	60	10.0	2.0	....	1000	....	.150	.030	25	9.5	5.0	2.0	8130	Diathermy	15 1250 1000 This type is not recommended for operation below 15 meters			
833-A	Triode	450	10.0	10.0	3000	4000	.300	.500	.025	35	5.5	10.1	6.4	....	R. F. Heating Oscillator Amplifier Class B Modulator				
834	Triode	50	7.5	3.25	1250	1250	.100	.100	.020	11	2.5	2.0	0.7	5500	UHF Oscillator RF Amplifier Class B Modulator				
838	Triode	100	10.0	3.25	1000	1250	.150	.175	.070	100	8.0	6.5	5.5	12500	Oscillator Amplifier Class B Modulator				
842	Triode	15	7.5	1.25	425	....	.035	....	....	3	7.0	4.0	3.0	2500	Amplifier Modulator				
845	Triode	75	10.0	3.25	1000	1250	.065	.095	.040	5	13.5	6.0	6.5	1800	Amplifier Modulator				
849	Triode	400	11.0	5.0	2000	3000	.350	.350	.125	19	33.5	17.0	3.0	3200	Oscillator Amplifier Modulator				
851	Triode	750	11.0	15.5	2500	3000	.1000	.1000	.200	20.5	47.0	25.5	4.5	1500	HF Heating Oscillator Amplifier Modulator				
860	Tetrode	100	10.0	3.25	2000	3000	.085	.150	.15	200	0.08	7.75	7.5	....	Oscillator Amplifier Modulator				
949-A	Triode	500	11.0	7.7	3500	4000	.500	.500	.110	19	11.5	14.0	1.7	2500	Oscillator Amplifier Modulator				
949-H	Triode	500	11.0	7.7	3500	4000	.500	.500	.110	19	11.5	10.0	1.8	2500	HF Heating Oscillator Amplifier				
952	Triode	100	10.0	3.25	....	3000	....	.150	.040	12	2.6	1.9	1.0	10000	Diathermy	7.5 10 15 6	2500 2500 3000 2250	2250 2250 2500 2000	160 180 210 140

UNITED ELECTRONICS

MERCURY VAPOR RECTIFIERS

Characteristics and Ratings

UNITED TYPE	FILAMENT		MAXIMUM PEAK INVERSE VOLTAGE	MAXIMUM PEAK PLATE CURRENT AMPERES	AVERAGE PLATE CURRENT AMPERES
	VOLTS	AMPERES			
866-A	2.5	5.0	10,000	1.0	0.250
872	5.0	10.0	7,500	5.0	1.250
872-A	5.0	6.75	10,000	5.0	1.250
975-A	5.0	10.0	15,000	6.0	1.500
315-A	5.0	10.0	12,500	7.0	1.750
Z-225	2.5	5.0	10,000	1.0	0.025
ESU-300	4.0	15.0	7,000	3.0	0.750

HIGH VACUUM RECTIFIERS

Characteristics and Ratings

UNITED TYPE	FILAMENT		MAXIMUM PEAK INVERSE VOLTAGE	MAXIMUM PEAK PLATE CURRENT AMPERES	AVERAGE PLATE CURRENT AMPERES
	VOLTS	AMPERES			
217-C	10.0	3.25	7,500	0.60	.015
371-B	5.0	10.3	25,000	1.50	.300
878	2.5	5.0	20,000	0.020	.005
V-1901	16.5	15.25	70,000	1.20	.040

MERCURY VAPOR GRID CONTROLLED RECTIFIERS

Characteristics and Ratings

TYPE	FILAMENT		MAXIMUM PEAK		AVERAGE PLATE CURRENT AMPERES	TYPE OF GRID CONTROL	CONDENSED MERCURY TEMPERATURE RANGE ° C.
	VOLTS	AMPERES	INVERSE VOLTAGE	PLATE CURRENT AMPERES			
967	2.5	5.0	2,500	2.0	.50	Neg.	40° - 80°
973	5.0	6.75	3,000	10.0	2.50	Neg.	40° - 80°
UX-973	5.0	6.75	3,000	10.0	2.50	Neg.	40° - 80°