

March 1, 1961

TWIN TRIODE

TYPE 7892

GENERAL DESCRIPTION

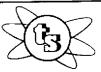
The Tung-Sol 7892 is a medium mu, high perveyance, twin triode intended only for pulse amplifier and oscillator service. Each triode section is electrically independent, although the two heaters have a common connection permitting either 6.3 volt or 12.6 Volt heater operation.

MECHANICAL DATA

Cathode	Coated Unipotential		
Outline drawing	JEDEC 6-2		
Maximum diameter	.875 inches		
Maximum overall length	2.118 inches		
Maximum seated height	1.312 inches		
Bulb	T-6 1/2		
Base	Miniature button 9-pin JEDEC E9-1		
Basing Diagram	JEDEC 9H		
Pin 1 - Triode 2 plate	Pin 6 - Triode l cathode		
Pin 2 - Triode 2 grid	Pin 7 - Triode 1 grid		
Pin 3 - Triode 2 cathode	Pin 8 - Heater center tap		
Pin 4 - Heater	Pin 9 - Triode 1 plate		
Pin 5 - Heater			
Mounting Position	Any		

ELECTRICAL DATA

Heater Characteristics and Ratings-De	esign Maximum Sys	tem ^A
When connected to pins:	8 and 4 - 5	4 and 5
Heater voltage	6.3±0.3	12.6±0.6 volts
Heater current at center voltage	900	450 ma
Maximum heater-cathode voltage		
Total dc and peak		±200 volts
Direct Interelectrode Capacitances-N	o external shield	
Grid to plate - each triode		4.0 pf
Input: g to(h+k) - each triode		4.0 pf
Output: p to(h+k) - triode 1		0.6 pf
triode 2		0.5 pf
Grid to grid - maximum		.025 pf
Plate to plate - maximum		.75 pf



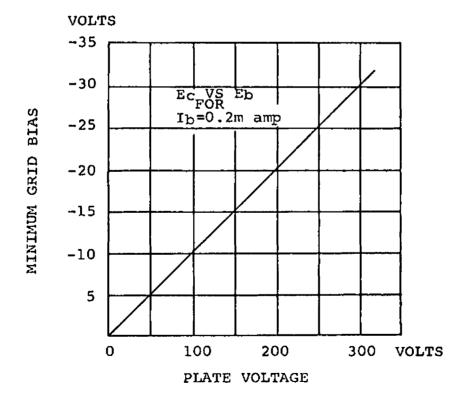
ELECTRICAL DATA-Cont'd

7892

Maximum Ratings-Design-Maximum System ^A		
Plate to cathode voltage-Pulse amplitudeB	330	volts
Spike amplitude ^B	1000	volts
Grid to cathode voltage - DC positive	0	volts
DC negative	100	volts
Peak positive	200	volts
Peak negative	200	volts
Plate dissipation - each plate	4.2	watts
both plates	7.5	watts
Grid dissipation - each grid	1.0	watts
Cathode current-see rating chart page 3		
Grid circuit resistance	1.1	megohm
Bulb temperature - at hottest point	225	o _C
Altitude ^C	60,000	feet

Typical Operating Conditions and Characteristics

Pulse amplifier - each unit Plate voltage +175 volts Grid voltage +175 volts Peak cathode current 5.0 amps Ratio plate current to grid current 1.5 Plate current cut-off - see curve below

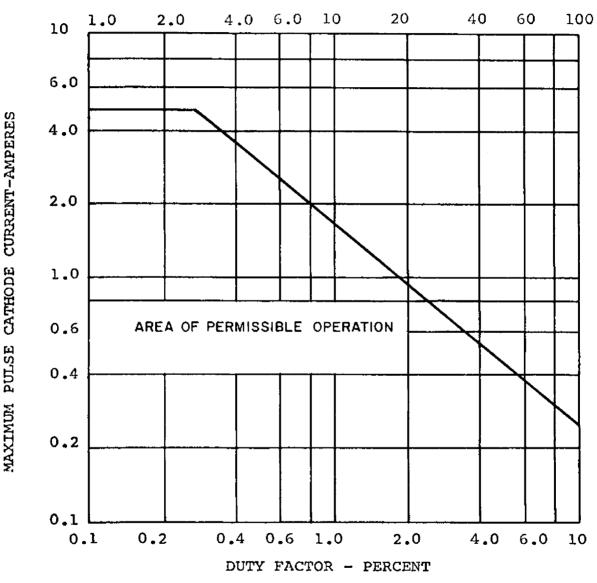


Notes:

- A. Limiting values beyond which normal tube life and normal tube performance may be impaired.
- B. For definition of terms, refer to MIL-E-ID, paragraph 4.10.7.5.
- C. If altitude exceeds this rating, reduction of instantaneous voltages (Ef excluded) and dissipation may be necessary.

Pulse Rating Chart

MAXIMUM PULSE WIDTH - MICRO SECONDS



This chart defines the "area of permissible operation" beyond which normal tube life and normal tube performance may be impaired. The manufacturer performs life tests at peak currents outside this area in order to assure satisfactory life performance within the "area of permissible operation".

This chart is applicable for operation when the duty factor does not exceed 10% and the pulse width does not exceed $100\mu s$. Greater duty factors and longer pulse widths are in the region of Class A, B, and C operation for which this tube is not rated.