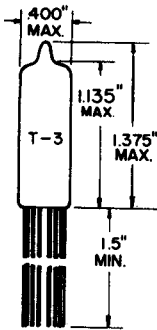


## TUNG-SOL

TWIN DIODE  
SUBMINIATURE

GLASS BULB

SUBMINIATURE BUTTON

FLEXIBLE LEADS

BASE - EB-10

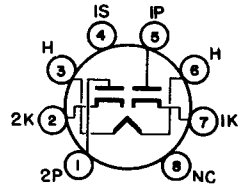
OUTLINE DRAWING

JEDEC 3-1

COATED UNIPOTENTIAL CATHODE

RUGGEDIZED LOW CURRENT  
POWER SUPPLY RECTIFIER

ANY MOUNTING POSITION



BOTTOM VIEW

BASING DIAGRAM

JEDEC 80J

THE 6110 IS A TWIN DIODE RECTIFIER IN THE 8 PIN SUBMINIATURE CONSTRUCTION. THIS TYPE IS CHARACTERIZED BY LONG LIFE AND STABLE PERFORMANCE. IT IS SUITABLE FOR HIGH OPERATING TEMPERATURES AND WHERE SEVERE CONDITIONS OF MECHANICAL SHOCK AND VIBRATION ARE ENCOUNTERED.

## DIRECT INTERELECTRODE CAPACITANCES

	WITHOUT SHIELD	WITH <sup>A</sup> SHIELD	
PLATE TO PLATE, (MAX.)	0.15	0.026	pf
INPUT (EACH UNIT) (P TO K <sup>+</sup> H+i.s. (e.s.))	1.5	2.2	pf
CATHODE TO ALL OTHER ELECTRODES (EACH UNIT)	2.6	2.6	pf

<sup>A</sup> WITH EXTERNAL SHIELD OF 0.405 INCH DIAMETER CONNECTED TO HEATER.

## HEATER CHARACTERISTICS AND RATINGS

ABSOLUTE VALUES

AVERAGE CHARACTERISTICS	6.3 VOLTS	150	MA.
HEATER SUPPLY LIMITS:			
VOLTAGE OPERATION		6.3±.315	VOLTS
MAXIMUM HEATER CATHODE VOLTAGE		±360	VOLTS

## MAXIMUM RATINGS

MECHANICAL

MAXIMUM IMPACT ACCELERATION <sup>D</sup>	450	G
MAXIMUM UNIFORM ACCELERATION <sup>E</sup>	1000	G
MAXIMUM VIBRATIONAL ACCELERATION FOR EXTENDED PERIODS <sup>F</sup>	2.5	G
MAXIMUM BULB TEMPERATURE	250	°C

CONTINUED ON FOLLOWING PAGE

**TUNG-SOL**

CONTINUED FROM PRECEDING PAGE

**MAXIMUM RATINGS<sup>A</sup>**

ABSOLUTE VALUES

PLATE SUPPLY VOLTAGE (AC) (EACH UNIT)	165	VOLTS
PEAK INVERSE PLATE VOLTAGE	460	VOLTS
PEAK PLATE CURRENT:		
STEADY STATE (EACH UNIT)	26.5	MA.
TRANSIENT (EACH UNIT)	160	MA.
OUTPUT CURRENT (DC) (EACH UNIT)	4.4	MA.

**TYPICAL OPERATING CHARACTERISTICS**  
**FULL-WAVE RECTIFIER**  
 (CAPACITOR INPUT TO FILTER)

PLATE VOLTAGE {AC} (EACH UNIT)	150	VOLTS
FILTER INPUT CAPACITANCE	8	$\mu$ f
EFFECTIVE PLATE SUPPLY IMPEDANCE	1 500	OHMS
OUTPUT CURRENT (DC)	8	MA.
LIFE EXPECTANCY:		
30°C AMBIENT TEMPERATURE	5 000	HOURS
175°C AMBIENT TEMPERATURE	1 000	HOURS
AVG. DIODE CURRENT (EACH UNIT) AT 40 VOLTS DC	15	MA.

<sup>D</sup>FORCES IN ANY DIRECTION AS APPLIED BY THE NAVY TYPE HIGH IMPACT (FLYWEIGHT) SHOCK MACHINE FOR ELECTRONIC DEVICES, OR EQUIVALENT.

<sup>E</sup>FORCES IN ANY DIRECTION APPLIED GRADUALLY, AS IN CENTRIFUGE.

<sup>F</sup>VIBRATIONAL FORCES IN ANY DIRECTION AT 60 CYCLES PER SECOND FOR A PERIOD EXCEEDING 100 HOURS.

<sup>G</sup>LIMITATIONS BEYOND WHICH NORMAL TUBE PERFORMANCE AND TUBE LIFE MAY BE IMPAIRED.

<sup>H</sup>TUBE LIFE AND RELIABILITY OF PERFORMANCE ARE DIRECTLY RELATED TO THE DEGREE OF REGULATION OF THE HEATER VOLTAGE TO ITS CENTER-RATED VALUE OF 6.3 VOLTS.