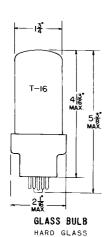
# TUMG-SOL .

## FULL WAVE RECTIFIER

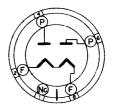


FILAMENT

5.0 VOLTS 2.0 AMP.

AC OR DC

VERTICAL MOUNTING POSITION TUBE MAY BE OPERATED IN HORIZONTAL POSITION IF PINS \*1 AND \*4 ARE IN VERTICAL PLANE.



BOTTOM VIEW SPECIAL SKIRTED 5 PIN. OCTAL 5T

THE 5R4WGA IS A HIGH VUCUUM FULL WAVE RECTIFIER CAPABLE OF SUPPLYING 950 VDC AT 165MA OR 750 VDC AT 275 MA. THIS TUBE TYPE PROVEN BY MILLIONS NOW IN FIELD USE FEATURES A RUGGED CONSTRUCTION THAT WILL WITHSTAND A SHOCK IMPACT OF 900 G AND HIGH VIBRATIONAL STRESSES.

ONE OF THE DESIGN FEATURES IS THE SHOCK MOUNTING OF THE BULB IN A SKIRTED TYPE BASE BY A RESILIENT SILICONE RUBBER. THUS, ALTHOUGH THE BASE MAY BE SECURELY CLAMPED TO THE CHASSIS, THE TUBE PROPER IS INSULATED AGAINST SHOCKS. THIS TYPE CF BASING ALSO PERMITS OPERATION AT HIGH ALTITUDES WITHOUT FLASH OVER. ANOTHER DESIGN FEATURE IS THE "CROSS PRESS" STEM WHICH KEEPS ELECTROLYSIS TO A MINIMUM WHILE OFFERING A STABLE SUPPORT FOR THE MOUNT STRUCTURE. THE USE OF A HARD GLASS BULB PERMITS THE TUBE TO BE PROCESSED AT HIGH TEMPERATURES DURING MANUFACTURE SO THAT IT WILL REMAIN GAS FREE UNDER THE HIGH TEMPERATURES ENCOUNTERED IN OPERATION. THE LOW DRAIN, FAST HEATING, RUGGED FILAMENT PERMITS INSTANT APPLICATION OF PLATE VOLTAGE OVER A LARGE PORTION OF THE OPERATING CHARACTERISTICS. (SEE CURVES).

#### ELECTRICAL DATA

FILAMENT VOLTAGE (± 10%) A.C. FILAMENT CURRENT A.C.

5.0 VOLTS 2.0 AMPS.

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# -- TUNG-SOL -

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### TYPICAL OPERATION

	INPUT TO FILTER		
	CHOKE	CAPACITOR	
AC PLATE VOLTAGE RMS PER PLATE	900	700	VAC
INPUT CONDENSER		4	мfd
INPUT CHOKE	10		н
EFFECTIVE PLATE SUPPLY IMPEDANCE PER PLATE		100	онмѕ
DC OUTPUT CURRENT	165	275	MA.
DC OUTPUT VOLTAGE AT FULL LOAD	840	730	VDC
DC OUTPUT VOLTAGE AT HAILF LOAD	860	800	VDC
REGULATION, HALF LOAD TO FULL LOAD	20	70	VDC

## MECHANICAL DATA

MOUNTING POSITION	VERTICAL	
MAXIMUM OVERALL HEIGHT	5.31	INCHES
MAXIMUM SEATED HEIGHT	4.75	INCHES
MAXIMUM DIAMETER	2.06	INCHES
BULB, HARD GLASS	<b>⊤</b> −16	
BASE: SPECIAL SKIRTED OCTAL 5 PIN, GLASS FILLED ALKYD,		

SEE OUTLINE

## MAXIMUM RATING CHART

ALTITUDE	FILTER INPUT	PEAK INV. Voltage	VOLTS RMS PER PLATE	MIN. SUPPLY IMPEDANCE PER PLATE
UP TO 30,000 FT.	4 u.f	3Q50v <sup>€</sup>	107Cv	575Ω⊕
UP TO 40,000 FT.	4 μf	2150 <sup>€.</sup>	760	
	5 HENRIES	2300 <del>°</del>	815	
	4 μf	2800 <sup>@</sup>	990	575 <sup>€</sup>
UP TO 60,000 FT.	$4 \mu f$	1850 <sup>@</sup>	655	

ALTITUDE UP TO 30,000 FT.	PEAK PLATE CURRENT O MA	CURRENT	FULL LOAD VOLTAGE 1525v
UP TO 40,000 FT.	700 <sup>€</sup>	275 €	770
-		275 <sup>€</sup>	650
	550	165 <sup>€</sup>	1100
UP TO 60,000 FT.	700€	275 <sup>®</sup>	620

 $<sup>^{</sup>oldsymbol{\Theta}}$  indicates maximum ratings; all others indicate approximate values.

INSULATION ZONE 5 OR BETTER.

ALL VALUES ARE FOR  $\rm E_f=5.0$  V. AND 10 SECONDS PREHEATING (NO PREHEATING IS NECESSARY FOR NO LOAD CONDTIONS). HIGHER VALUES OF FILTER CONDENSER CAPACITY MAY BE USED IF PLATE SUPPLY IMPEDANCE IS INCREASED TO KEEP PEAK PLATE CURRENT WITHIN RATINGS. FILTER VALUES ARE FOR 60 CYCLE OPERATION.

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