U192/PY82
HALF WAVE RECTIFIER
Indirectly heated—for series operation

←

GENERAL

The U192/PY82 is a miniature based Half Wave rectifier intended for use in AC/DC powered equipment having series connected heater chains.

RATING

Heater Current	I_h		0·3 A
Heater Voltage	V_h		19·0 V
Maximum Anode Voltage (r.m.s.)	$V_{a(rms)max}$		250 V
Maximum DC Output Current	$I_{a(max)}$		180 mA
Maximum Peak Inverse Voltage	P.I.V.(max)		700 V
Maximum Reservoir Condenser	C_{max}		60* μF
Maximum Anode Voltage (r.m.s.)	$V_{a(max)}$	200 210 220 230 240 250 V	←
Minimum Surge Limiting Resistance (absolute)	R_{lim}	28.5 30 40 60 80 100 Ω	←
Maximum Heater/Cathode Voltage (peak, heater negative)	$v_{h-k(max)}$		550† V

* Allowable tolerance +80%. When two U192 are parallel connected C_{max}=100 μF and each anode must have a surge limiting resistor not less than the minimum value quoted in Typical Operation.

† Maximum AC 220 Vr.m.s. + Maximum DC 250 V measured with respect to the higher potential heater pin.

DIMENSIONS

Maximum Overall Length	78·5 mm
Maximum Diameter	22·2 mm
Maximum Seated Height	71·5 mm
Approximate Nett Weight	$\frac{1}{4}$ozs
Approximate Packed Weight	$\frac{3}{4}$ozs

Indicates a change ←

THORN — AEI RADIO VALVES & TUBES LTD.

U192/PY82
HALF WAVE RECTIFIER
Indirectly heated—for series operation

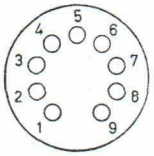
←

MOUNTING POSITION—Unrestricted

TYPICAL OPERATION

DC Load Current				I_{out}			180	mA
DC Rectified Output				V_{out}			195	V
Reservoir Capacity				C			60	μF
Anode Voltage (r.m.s.)	V_a	200	210	220	230	240	250	V
Recommended Anode Surge Limiting Resistance	R_a	30	45	65	85	105	125	Ω

BASE—Noval (B9A)



Viewed from free end of pins.

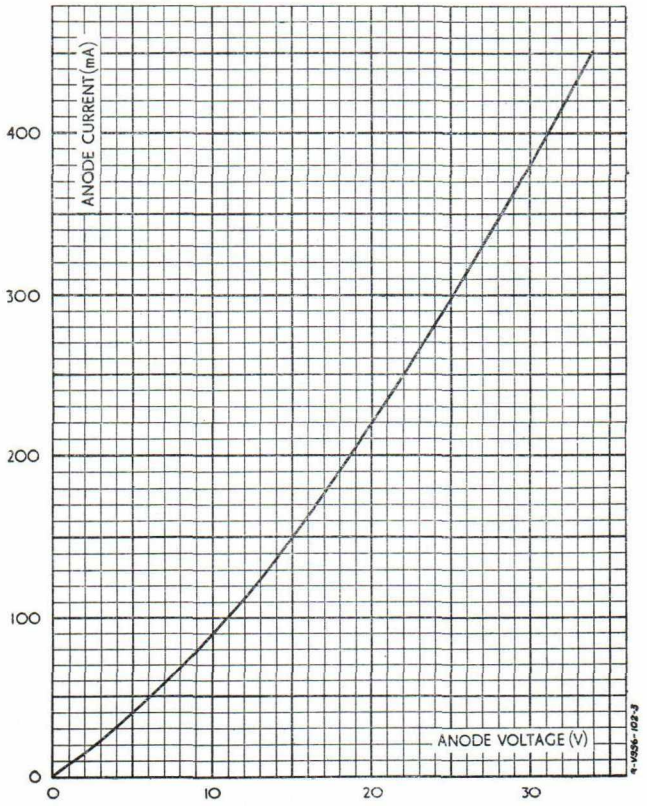
CONNECTIONS

Pin 1	Internal Connection	IC
Pin 2	Internal Connection	IC
Pin 3	Cathode	k
Pin 4	Heater	h
Pin 5	Heater	h
Pin 6	Internal Connection	IC
Pin 7	Internal Connection	IC
Pin 8	Internal Connection	IC
Pin 9	Anode	a

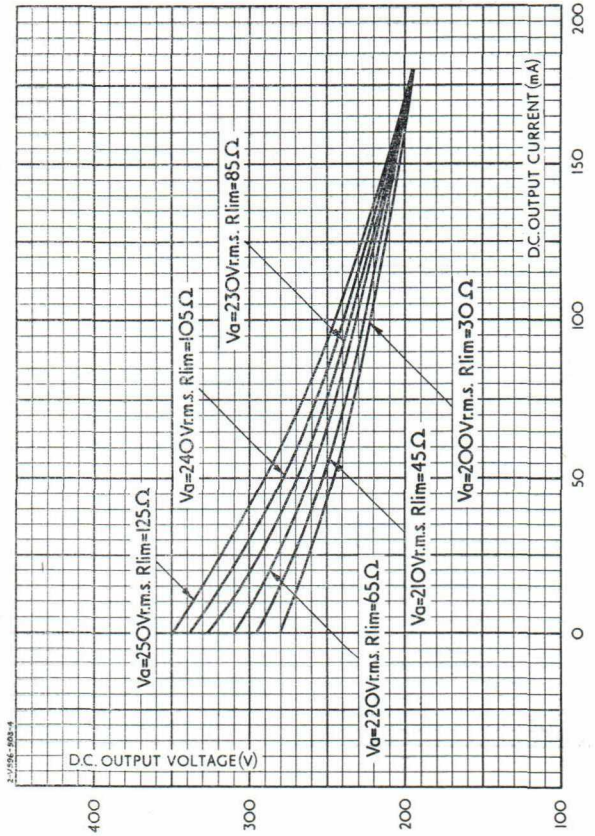
Indicates a change ←

U192/PY82
HALF WAVE RECTIFIER
Indirectly heated—for series operation

AVERAGE CHARACTERISTIC CURVE : I_a/V_a



THORN — A E I RADIO VALVES & TUBES LTD.

U192/PY82
HALF WAVE RECTIFIER
Indirectly heated—for series operation

AVERAGE CHARACTERISTIC CURVES : Regulation
C = 60 μF