Thyratron Trigger PCB

DESCRIPTION

- Dual thyratron trigger PCB for medium and high power thyratrons.
- Optically isolated input trigger with dual output grid 1 and grid 2 triggers.

SPECIFICATIONS

Electrical

Input

	Min	Max	Nom	Units	Notes
Drive power input voltage	198	242	220	V ac	
Bias power input voltage	99	121	110	V ac	
Control power input voltage	16	20	18	V ac	
Input frequency	47	63	60	Hz	
Input trigger pulse width	1	100	-	µs	
Input trigger frequency	-	500	-	Hz	Up to 1kHz with forced air cooling.

Output

Grid 1 output voltage	500	-	-	V pk	Open circuit voltage.
Grid 1 output current	-	50	-	A pk	Add resistance to adjust.
Grid 1 output impedance	4.7	5.3	5.0	Ω	
Grid 1 output pulse width	0.70	0.80	0.75	µs	
Grid 2 output voltage	1000	-	-	V pk	Open circuit voltage.
Grid 2 output current	-	10	-	A pk	
Grid 2 output impedance	47	53	50	Ω	
Grid 2 output pulse width	0.45	0.55	0.50	µs	
Grid 2 rate of rise voltage	5	-		kV/us	
Grid 2 bias voltage	-140	-170	-155	V dc	
Grid 2 bias current	-	20	-	mA dc	
Input trigger to grid 1 pulse delay	0.0	0.2	0.1	µs	
Input trigger to grid 2 pulse delay	0.5	0.7	0.6	µs	
Grid 1 to grid 2 pulse delay	0.45	0.55	0.5	µs	
Input trigger to grid 2 pulse jitter	-	2	-	ns	

Mechanical

Length	-	-	22.9	cm
Width	-	-	20.3	cm
Height	-	-	5	cm

Environmental

Operating temperature	+10 to +40 °C
Cooling	natural convection

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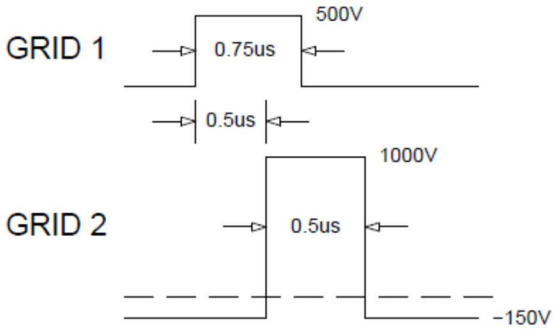

Figure 1 - Output Characteristics