

3070-PP

Široko propusni 250 kHz torusni izlazni transformator je namenjen za snažne (70 W) visoko kvalitetne cevne pojačavače. Ili dve izlazne cevi se mogu napajati sa 450 do 600 V, ili četiri izlazne cevi u paralelnoj vezi napona napajanja do 350 V. Ima izvode za rešetke na 40 % a primarna impedansa je blizu 3 k Ω . Sekundarna impedansa je standardno 5 Ω . Mogu se primeniti sa cevima KT88 ili KT90. Ovaj transformator daje glasan visoko kvalitetan zvuk sa manje efikasnim bas refleks ili zatvorenim zvučničkim kutijama. Ne stvara rezonancije i propusni opseg na visokim frekvencijama je veći pa je dozvoljena veća povratna sprega nego normalno koja stvara manju distorziju i jako dampiranje zvučnika. Pogledati (*) za detaljno objašnjenje.

(*) Menno van der Veen: Modern High-end Valve Amplifiers based on toroidal output transformers; Elektor, ISBN: 978-0-905705-63-7; poglavlje 11.

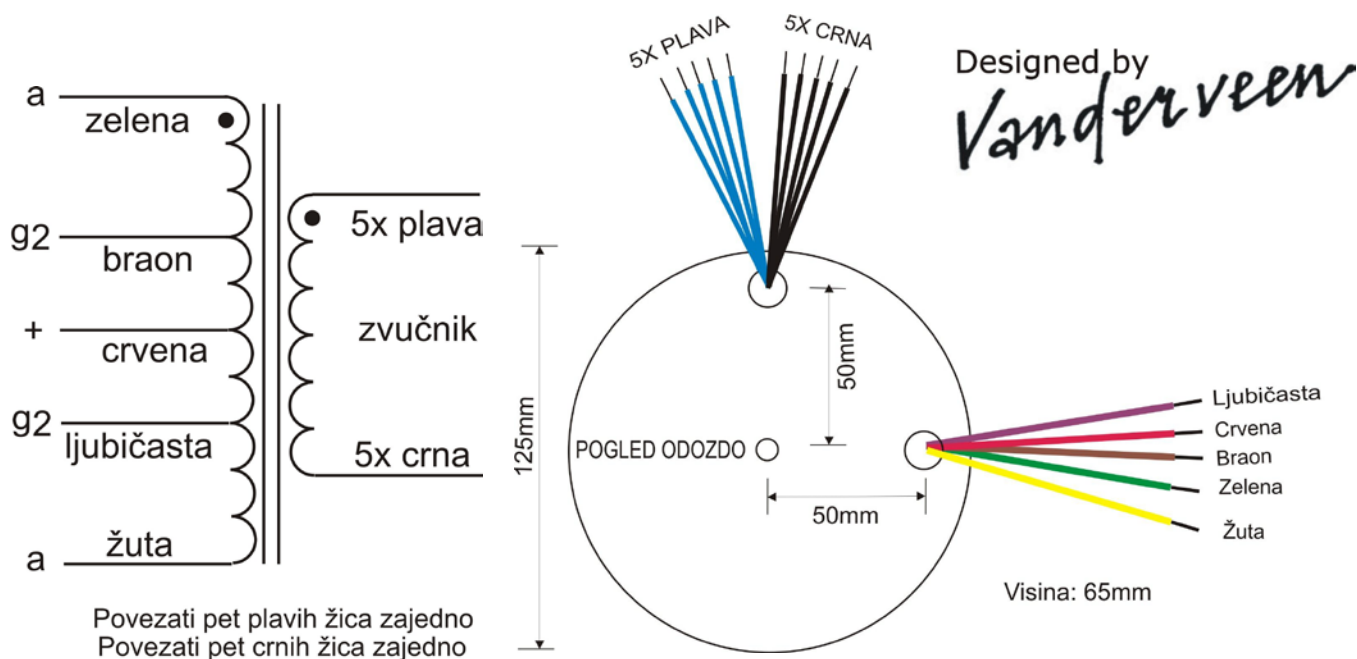
Transformator je zaliven u metalnom kružnom kućištu koje je plastificirano crnom mat bojom.

Dimenzije (prečnik x visina): 125mm x 65mm

Težina: 1,9 Kg.

Cena: 203€ (Dinarska protivvrednost).

Tehnički podaci:



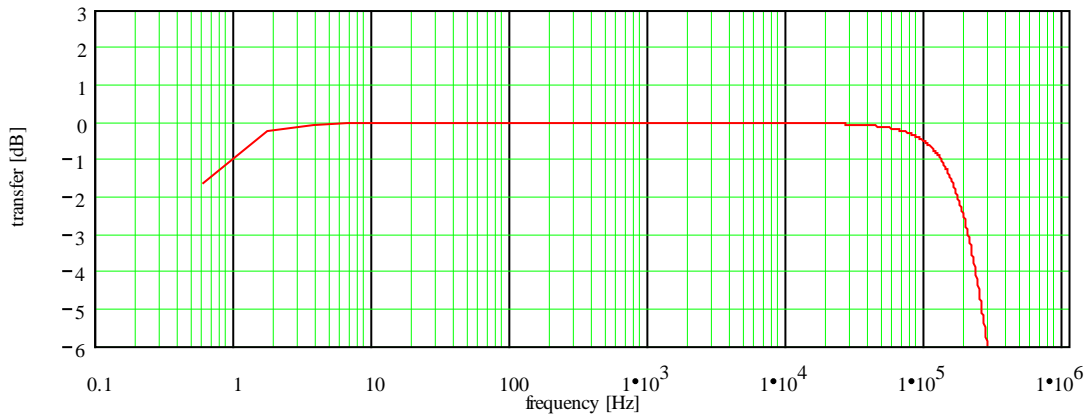
WIDE BANDWIDTH TOROIDAL PUSH-PULL TUBE OUTPUT TRANSFORMER

Type and Application		VDV-3070.	
Primary Impedance	:	$R_{aa} = 2.756$	[k Ω]
Secondary Impedance	:	$R_{ls} = 5$	[Ω]
Turns Ratio N_p/N_s	:	Ratio = 23.478	[]
UL-tap:		tap = 40	[%]
Cathode Feedback Ratio	:	cfb = 0	[%]
-1 dB Frequency Range [Hz to kHz] (3)	:	f _{lf} = 1.845	f _{hf} = 63.678
-1 dB Frequency Range [Hz to kHz] (3)	:	f _{l1} = 0.787	f _{h1} = 120.636
-3 dB Frequency Range [Hz to kHz] (3)	:	f _{l3} = 0.4	f _{h3} = 187.37
Nominal Power (1)	:	$P_n = 70$	[W]
- 3 dB Power Bandwidth starting at	:	$f_u = 22.7$	[Hz]
Total primary Inductance (2)	:	$L_p = 490$	[H]
Primary Leakage Inductance	:	$l_{sp} = 2.6$	[mH]
Effective Primary Capacitance	:	$c_{ip} = 0.558$	[nF]
Total Primary DC Resistance	:	$R_{ip} = 173.7$	[Ω]
Total Secondary DC Resistance	:	$R_{is} = 0.168$	[Ω]
Tubes Plate Resistance per section	:	$r_i = 1$	[k Ω]
Insertion Loss	:	$l_{loss} = 0.401$	[dB]
Q-factor 2nd order HF roll-off (5)	:	$Q = 0.639$	[]
HF roll-off Specific Frequency (5)	:	$F_o = 209.392$	[kHz]
Quality Factor (5)	:	$QF = 1.885 \cdot 10^5$	[]
Quality Decade Factor = log(QF) (5)	:	$QDF = 5.275$	[]
Tuning Factor (5)	:	$TF = 2.483$	[]
Tuning Decade Factor = log(TF) (5)	:	$TDF = 0.395$	[]
Frequency Decade Factor (4,5)	:	$FDF = 5.67$	[]

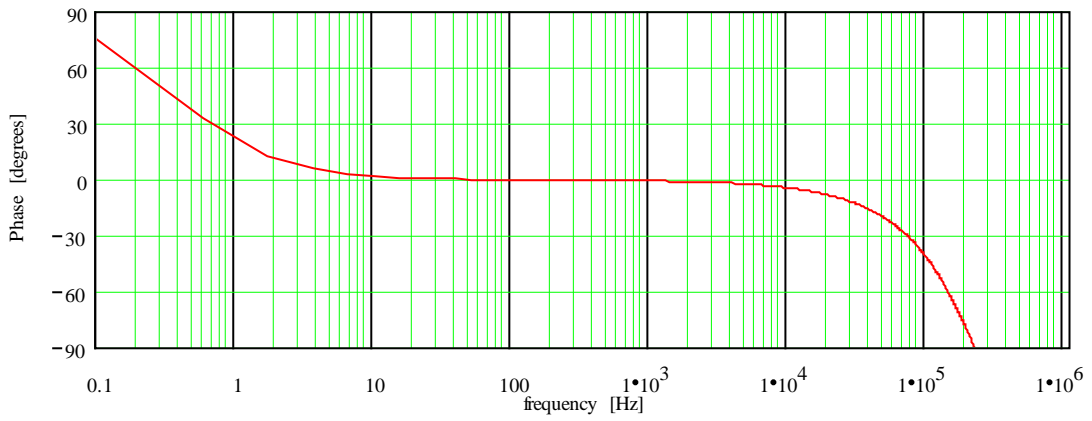
- (1): calculated under the conditions of balancing the DC-currents and the AC-anode voltages of the powertubes driving the transformer
- (2): measured at 230V_{rms} at 50Hz over total primary
- (3): calculation at 1 Watt in R_{ls}; r_i and R_{ls} are pure Ohmic
- (4): defined as $FDF = \log(f_{h3}/f_{l3}) =$ number of frequency decades transferred
- (5): ir. Menno van der Veen; Theory and Practise of Wide Bandwidth Toroidal Output Transformers: preprint 3887. 97th AES Convention San Francisco Copyright 1994 Vanderveen; Version 1.7; results date 2-2-2012.
- (C): Final specs can deviate 15% or improve without notice

TRAFCO TOROIDAL PUSH-PULL TRANSFORMER ; VDV-3070

Frequency Response; Vertical 1 dB/div; Horizontal .1 Hz to 1 MHz (3)



Phase Response; Vertical 30 deg./div; Horizontal .1 Hz to 1 MHz



Differential Phase Distortion; vert. 30 deg./div; hor .1 Hz to 1 MHz

See: W.M.Leach, Differential Time Delay...; JAES sept.89 pp.709-715

