

2100-SSCR-PP

The very wide bandwidth (200 kHz) toroidal push-pull output transformer 2100-SSCR is meant for very high power (100 Watt) extreme loud high quality tube amplifiers. Four paralleled power tubes should be used like the EL34 (guitar) or the 6550 or KT88/90 for high-end applications. Separate screen grid windings of 40 % are present, allowing higher than normal anode supply voltages. The primary impedance is close to 2 kOhm. The secondary is at the standardized 5 Ohm impedance. This transformer is meant for very dynamic high quality sound reproduction. See (*) for a description of this transformer.

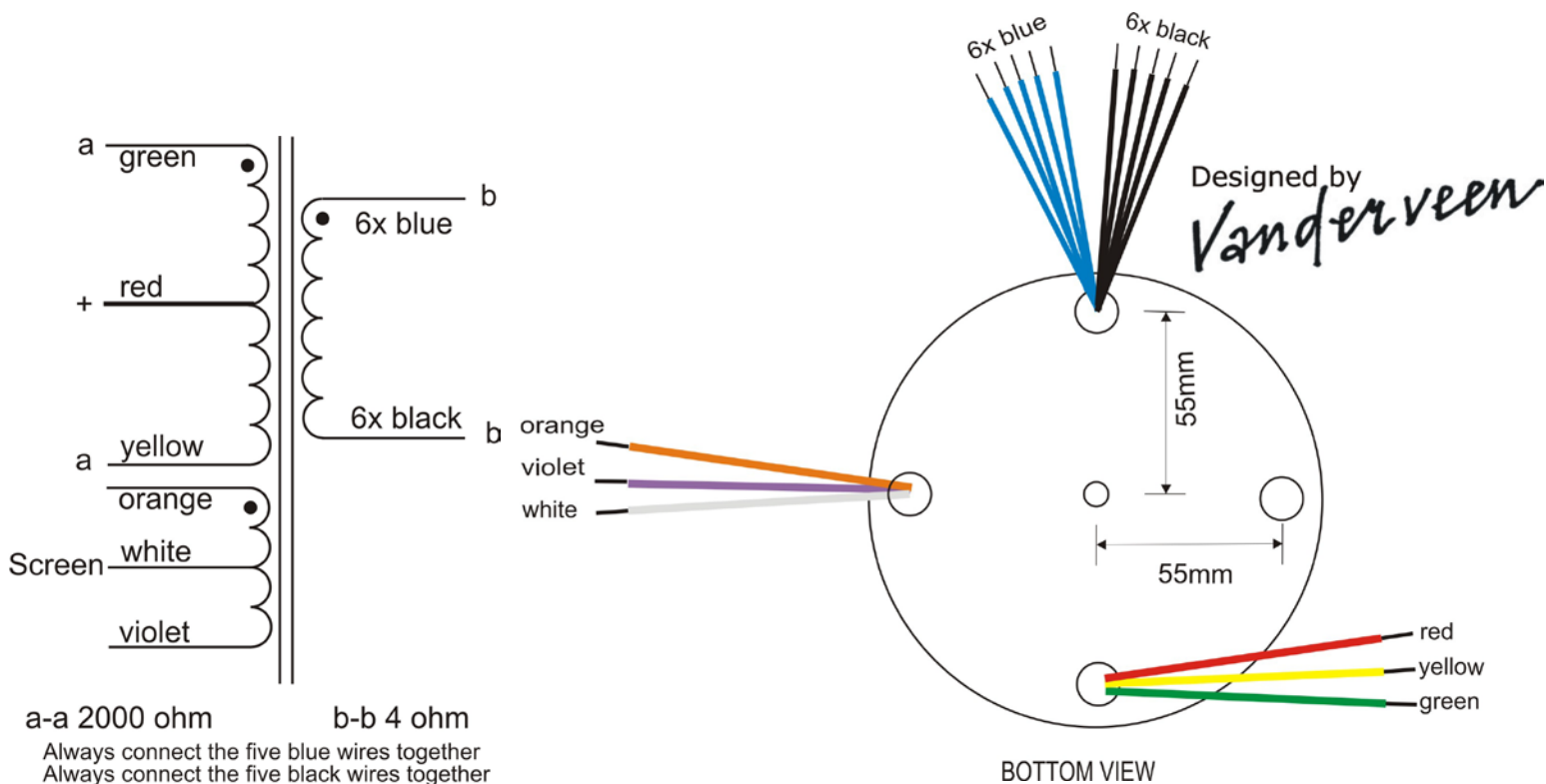
(*) Menno van der Veen: High-end Valve Amplifiers 2, New models and applications; Elektor; ISBN: 978-0-905705-90-3; chapter 3

dimensions: 155mm x 90mm.

weight: 5,3 Kg.

price: 299€

technical data:



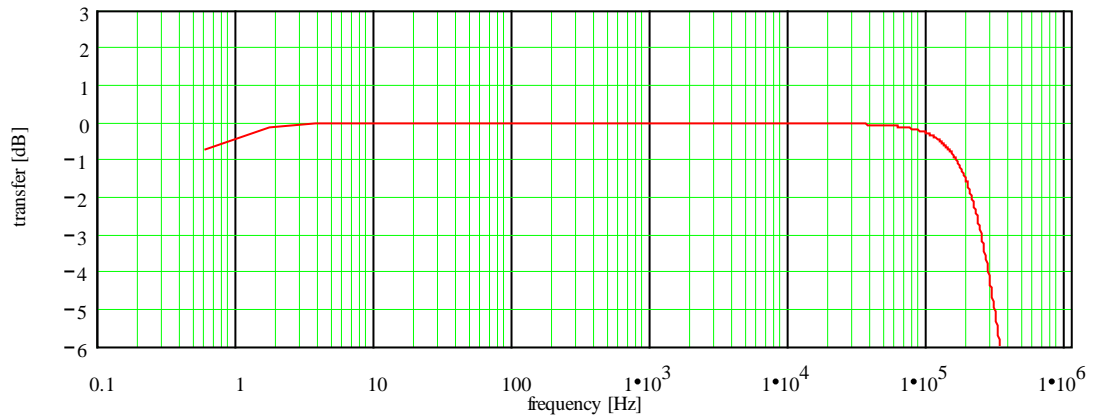
WIDE BANDWIDTH TOROIDAL PUSH-PULL TUBE OUTPUT TRANSFORMER

Type and Application		VDV-2100-CFB.	
Primary Impedance	:	Raa = 1.995	[kΩ]
Secondary Impedance	:	Rls = 5	[Ω]
Turns Ratio Np/Ns	:	Ratio = 19.977	[]
UL-tap:		tap = 33	[%]
Cathode Feedback Ratio	:	cfb = 10	[%]
-1 dB Frequency Range [Hz to kHz] (3)	:	flf = 1.141	fhf = 83.91
-1 dB Frequency Range [Hz to kHz] (3)	:	fl1 = 0.487	fh1 = 149.547
-3 dB Frequency Range [Hz to kHz] (3)	:	fl3 = 0.248	fh3 = 224.74
Nominal Power (1)	:	Pn = 100	[W]
- 3 dB Power Bandwidth starting at	:	fu = 14	[Hz]
Total primary Inductance (2)	:	Lp = 663	[H]
Primary Leakage Inductance	:	lsp = 1.4	[mH]
Effective Primary Capacitance	:	cip = 0.638	[nF]
Total Primary DC Resistance	:	Rip = 63	[Ω]
Total Secondary DC Resistance	:	Ris = 0.17	[Ω]
Tubes Plate Resistance per section	:	ri = 1	[kΩ]
Insertion Loss	:	Iloss = 0.276	[dB]
Q-factor 2nd order HF roll-off (5)	:	Q = 0.66	[]
HF roll-off Specific Frequency (5)	:	Fo = 241.886	[kHz]
Quality Factor (5)	:	QF = 4.736•10 ⁵	[]
Quality Decade Factor = log(QF) (5)	:	QDF = 5.675	[]
Tuning Factor (5)	:	TF = 1.916	[]
Tuning Decade Factor = log(TF) (5)	:	TDF = 0.282	[]
Frequency Decade Factor (4,5)	:	FDF = 5.958	[]

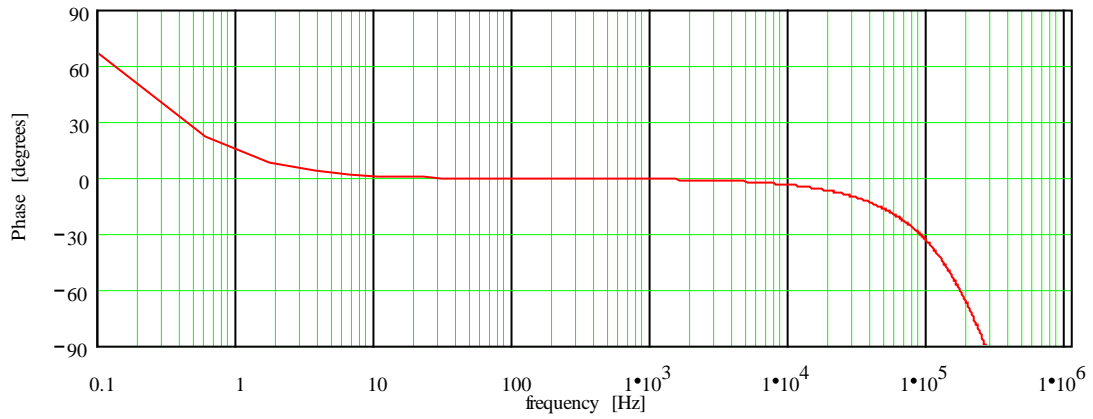
- (1): calculated under the conditions of balancing the DC-currents and the AC-anode voltages of the powertubes driving the transformer
- (2): measured at 230Vrms at 50Hz over total primary
- (3): calculation at 1 Watt in Rls; ri and Rls are pure Ohmic
- (4): defined as FDF = log(fh3/fl3) = number of 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
- (C): Copyright 1994 Vanderveen; Version 1.7; results date 2-2-2012.
Final specs can deviate 15% or improve without notice

TRAFCO TOROIDAL PUSH-PULL TRANSFORMER ; VDV-2100-CFB

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

