WIDE BANDWIDTH TOROIDAL PUSH-PULL TUBE OUTPUT TRANSFORMER

Type and Application		VDV-4140-SSCR-CFB @ 4 Ohm secondary.	
Primary Impedance	:	$Raa = 1.6$	[kOhm]
Secondary Impedance 2 / 4 / 8	:	$Rls = 4$	[Ohm]
Turns Ratio Np/Ns	:	$Ratio = 20$	[ ]
UL-tap	:	$tap = -40$	[%]
Cathode Feedback Ratio	:	$cfb = 10$	[%]
-.1 dB Frequency Range [Hz to kHz] (3):		$flf = 0.994$ $fhf = 20.753$	
-1 dB Frequency Range [Hz to kHz] (3):		$fl1 = 0.424$ $fh1 = 26.654$	
-3 dB Requency Range [Hz to kHz] (3):		$fl3 = 0.216$ $fh3 = 34.954$	
Nominal Power (1)	:	$Pn = 300$	[W]
- 3 dB Power Bandwidth starting at	:	$fu = 14$	[Hz]
Total primary Inductance (2)	:	$Lp = 758.4$	[H]
Primary Leakage Inductance	:	$lsp = 17.5$	[mH]
Effective Primary Capacitance	:	$cip = 2.273$	[nF]
Total Primary DC Resistance	:	$Rip = 53.4$	[Ohm]
Total Secondary DC Resistance	:	$Ris = 0.199$	[Ohm]
Tubes Plate Resistance per section	:	$ri = 1.3$	[kOhm]
Insertion Loss	:	$Iloss = 0.347$	[dB]
Q-factor 2nd order HF roll-off (5)	:	$Q = 0.763$	[ ]
HF roll-off Specific Frequency (5)	:	$Fo = 32.577$	[kHz]
Quality Factor (5)	:	$QF = 4.334 \times 10^4$	[ ]
Quality Decade Factor = log(QF) (5)	:	$QDF = 4.637$	[ ]
Tuning Factor (5)	:	$TF = 3.737$	[ ]
Tuning Decade Factor = log(TF) (5)	:	$TDF = 0.572$	[ ]
Frequency Decade Factor (4,5)	:	$FDF = 5.209$	[ ]

(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 transfered
(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 08-03-2015.
Final specs can deviate 15% or improve without notice