VDV-3025-SE SINGLE ENDED OUTPUT TRANSFORMER

TYPE & APPLICATION	:	VDV3025-SE vs02 190612 45-temp	
Primary Impedance	:	Raa = 2.491	[kΩ]
Secondary Impedance 0/4/8/16 Ohm	:	Rls = 4	[Ω]
Turns Ratio Np/Ns	:	Ratio = 24.957	[ ]
-.1 dB Frequency Range [Hz] - [kHz]	:	flf = 21.144	fhf = 23.231
-1 dB Frequency Range [Hz] - [kHz]	:	fl1 = 9.018	fh1 = 51.744
-3 dB Frequency Range [Hz] - [kHz]	:	fl3 = 4.59	fh3 = 95.769
Nominal Power (1)	:	Pn = 13	[W]
Full Power Bandwidth Starting at	:	fPnom = 20	[Hz]
Total Primary Inductance (2)	:	Lp = 20	[H]
Primary Leakage Inductance to sec.	:	lsp = 5.2	[mH]
Effective Primary Capacitance	:	Cip = 1	[nF]
Saturation Primary Current	:	2·Idc = 204.316	[mA]
Total Primary DC Resistance	:	Rip = 45	[Ω]
Total Secondary DC Resistance	:	Ris = 0.1	[Ω]
Tubes Plate Resistance	:	rp = 0.7	[kΩ]
Insertion Loss	:	Iloss = 0.183	[dB]
Q-factor 2-nd order HF roll-of (5)	:	Q = 0.494	[ ]
HF roll-off Specific Frequency (5)	:	Fo = 151.507	[kHz]
Quality Factor = Lp/Lsp (5)	:	$QF = 3.846 \times 10^3$	[ ]
Quality Decade Factor (5)	:	QDF = 3.585	[ ]
Tuning Factor (5)	:	TF = 5.425	[ ]
Tuning Decade Factor (5)	:	TDF = 0.734	[ ]
Frequency Decade Factor (4,5)	:	FDF = 4.319	[ ]

(1): calculated and measured under the conditions of applying 0.5*Idc-sat.
(2): 230 Volt 50 Hz measurement over the total primary winding
(3): calculated and measured 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, 97-th AES Convention San Francisco, preprint
(C): copyright Vanderveen 1997, Version 1.3; design date 12-6-2019