VDV-6025-SE SINGLE ENDED OUTPUT TRANSFORMER

TYPE & APPLICATION	:	VDV-6025-	SE
Primary Impedance	:	Raa = 2.497	[kΩ]
Secondary Impedance	:	R1s = 4	[Ω]
Turns Ratio Np/Ns	:	Ratio = 24.98	87 []
1 dB Frequency Range [Hz] - [kHz]	:	flf = 17.914	fhf = 20.698
-1 dB Frequency Range [Hz] - [kHz]	:	fl1 = 7.641	fh1 = 46.883
-3 dB Frequency Range [Hz] - [kHz]	:	f13 = 3.888	fh3 = 90.715
Nominal Power (1)	:	Pn = 29	[W]
Full Power Bandwidth Starting at	:	fPnom = 22	[Hz]
Total Primary Inductance (2)	:	Lp = 18	[H]
Primary Leakage Inductance to sec.	:	1sp = 5.4	[mH]
Effective Primary Capacitance	:	Cip = 0.75	[nF]
Saturation Primary Current	:	$2 \cdot \mathrm{Idc} = 304.7$	793 [mA]
Total Primary DC Resistance	:	Rip = 51	[Ω]
Total Secondary DC Resistance	:	Ris = 0.1	[Ω]
Tubes Plate Resistance	:	rp = 0.48	[kΩ]
Insertion Loss	:	Iloss = 0.193	[dB]
Q-factor 2-nd order HF roll-of (5)	:	Q = 0.387	[]
HF roll-off Specific Frequency (5)	:	Fo = 200.68	[kHz]
Quality Factor = Lp/Lsp (5)	:	QF = 3.333×	10 ³ []
Quality Decade Factor (5)	:	QDF = 3.523	[]
Tuning Factor (5)	:	TF = 6.999	[]
Tuning Decade Factor (5)	:	TDF = 0.845	[]
Frequency Decade Factor (4,5)		FDF = 4.368	[]
Diameter-[mm] Height-[mm] Weight-[kg]	:	Dia = 160 HT = 9	0 WT = 6.4

(1): calculated and measured under the conditions of applying 0.5*Idc-sat.
(2): 240 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 02: design date 2019-07-05



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