

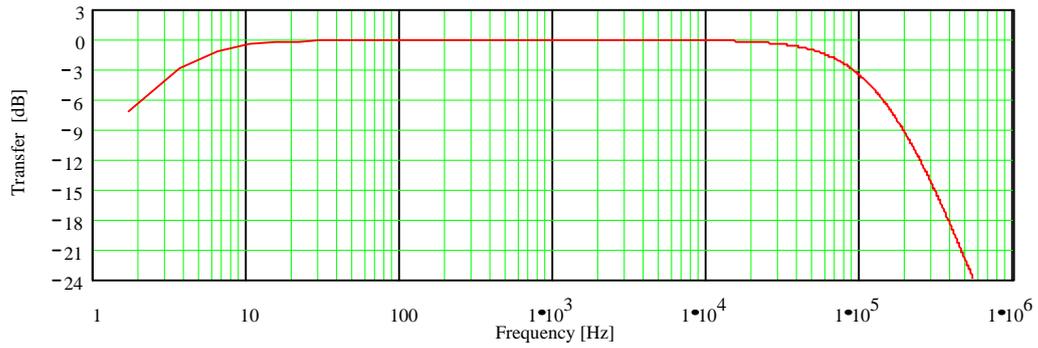
VDV3035-SE SINGLE ENDED OUTPUT TRANSFORMER

TYPE & APPLICATION	:	VDV3035-SE	
Primary Impedance	:	Raa = 3.486	[kΩ]
Secondary Impedance	:	Rls = 4	[Ω]
Turns Ratio Np/Ns	:	Ratio = 29.522	[]
-1 dB Frequency Range [Hz] - [kHz]	:	flf = 16.233	fhf = 21.806
-1 dB Frequency Range [Hz] - [kHz]	:	fl1 = 6.924	fh1 = 48.579
-3 dB Frequency Range [Hz] - [kHz]	:	fl3 = 3.524	fh3 = 89.948
Nominal Power (1)	:	Pn = 13	[W]
Full Power Bandwidth Starting at	:	fPnom = 20	[Hz]
Total Primary Inductance (2)	:	Lp = 28	[H]
Primary Leakage Inductance to sec.	:	lsp = 7	[mH]
Effective Primary Capacitance	:	Cip = 1.1	[nF]
Saturation Primary Current	:	2·Idc = 172.721	[mA]
Total Primary DC Resistance	:	Rip = 50	[Ω]
Total Secondary DC Resistance	:	Ris = 0.1	[Ω]
Tubes Plate Resistance	:	rp = 0.7	[kΩ]
Insertion Loss	:	Iloss = 0.168	[dB]
Q-factor 2-nd order HF roll-of (5)	:	Q = 0.493	[]
HF roll-off Specific Frequency (5)	:	Fo = 142.539	[kHz]
Quality Factor = Lp/Lsp (5)	:	QF = 4·10 ³	[]
Quality Decade Factor (5)	:	QDF = 3.602	[]
Tuning Factor (5)	:	TF = 6.382	[]
Tuning Decade Factor (5)	:	TDF = 0.805	[]
Frequency Decade Factor (4,5)	:	fdf = 4.407	[]

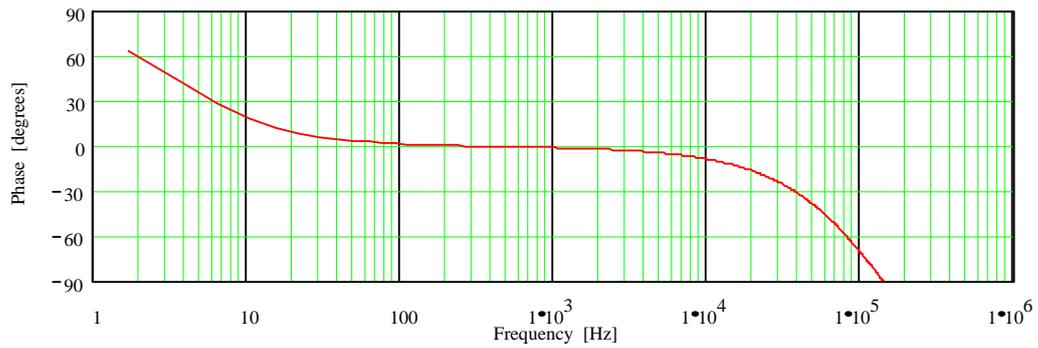
- (1): calculated and measured under the conditions of applying 0.5·Idc-sat.
(2): 230 Volt 50 Hz measurement over the total primary winding
(3): calculated and measured at 1 Watt in Rls; ri and Rls are pure Ohmic
(4): defined as FDF = log(fh3/fl3) = number of frequency decades transferred
(5): ir. Menno 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 7-11-1997

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[dB] Frequency Response; Vertical: 3 dB/div; Horizontal: 1 Hz to 1 MHz (3)



[degrees] Phase Response; Vertical: 30 deg./div; Horizontal: 1 Hz to 1 MHz



[degrees] Differential Phase Response; vert. 30 deg./div; hor. 1 Hz to 1 MHz
See: W.M.Leach, Differential Time Delay..; JAES sept.89 pp.709-715

