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Vishay's SGIHLP Series and IHDF Series Added to the IHLP® Inductor Loss Calculator Tool

Vishay's Inductor Loss Calculator estimates the losses in IHLP / IHLM / IHLW / IHTH — and now SGIHLP and IHDF — series inductors used in continuous mode power converters. Both copper and core losses are estimated. The tool may also be used to estimate temperature rise, but actual results may differ.

IHLP® INDUCTOR LOSS CALCULATOR TOOL

[Instructions](#) [Help](#)

Choose Calculator Type Buck <input type="text"/>	SGIHLP-48FA-8 - 10 Buck μ H Ind. Loss Calculator						Ratings				
							Inductance	10	μ H		
Applications Space Grade <input type="text"/>							25° C DC Res	0.0309	Ohms		
Family SGIHLP <input type="text"/>							Isat	8.5	Amps		
Case Size 48 <input type="text"/>							I(Heat)	6.5	Amps		
Series FA-8 <input type="text"/>											
Select Inductance: 0.47 μ H <input type="radio"/> 1 μ H <input type="radio"/> 1.5 μ H <input type="radio"/> 2.2 μ H <input type="radio"/> 3.3 μ H <input type="radio"/> 4.7 μ H <input type="radio"/> 5.6 μ H <input type="radio"/> 6.8 μ H <input type="radio"/> 10 μ H <input checked="" type="radio"/> 15 μ H <input type="radio"/> 22 μ H <input type="radio"/> 33 μ H <input type="radio"/> 47 μ H <input type="radio"/> 68 μ H <input type="radio"/>	Inputs: Enter data into yellow fields			Outputs			Inductor Current (One Cycle) 				
	Frequency =	500000	Hz	ET _{ckt}	18.49	V-usec					
	I _{ind} =	5	Amps	F(eff)	413175.2	Hertz					
	Ambient Temp =	25	°C	Res	0.035663	Ohms					
	Volts In =	48	Volts	I _{max}	5.92	Amps					
	Volts Out =	12	Volts	I _{min}	4.08	Amps					
	V _{SW} =	0.5	Volts	I _{ripple}	1.85	Amps					
	V _D =	0.5	Volts	Duty	0.26						
				P _{core}	0.885	Watts					
	ET ₁₀₀ =	4.12	V-usec	P _{dc}	0.892	Watts					
	B _{pk} =	448.8	G	P _{ac}	0.543	Watts					
	A	0.500	Inch	12.7	mm	P _{tot}				2.319	Watts
	B	0.480	Inch	12.19	mm	Temp. Coeff.				26.6	°C/W
	C	0.24	Inch	6.10	mm	Temp Rise				61.6	°C
	Reference Cost					Comp Temp				86.6	°C

Useful Links

- [Calculator](https://www.vishay.com/inductors/calculator/calculator/)

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