

Magnetic Components

Switch Mode Magnetics



Air Core Inductors



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CUSTOM DESIGN AND PRODUCTION

Vishay Dale has extensive facilities for custom design and production of custom magnetics. Design applications include:

- PWM, PSM and FM Transformers
- Pulse and Trigger Transformers
- Test Measurement Transformers
- Power Transformers
- Power, Filter and Switchmode Inductors
- Telecommunications/Audio Transformers

Design Input forms for the above design applications follow:

PACKAGE DESIGN AND MATERIALS

If you have your own electrical design we can add value by assisting you with selection of the most economical materials and efficient packaging design.

Vishay Dale can provide designs to meet UL, CSA, IEEE and VDE requirements.

Produced to your specifications for a wide range of high frequency applications including: Television, Radio (2-way, scanners, AM/FM), Satellite Communication, Cable TV Systems, Microwave, Test Equipment.

ELECTRICAL SPECIFICATIONS

Frequency: to 500 MHz

Current: 10 amp maximum

Temperature: to + 130 °C

MECHANICAL SPECIFICATIONS

Winding: 1 to 32 turns, clockwise or counter-clockwise with variable pitch

Wire Gauge: #18 to #32

Leads: Automatically tinned. Various configurations available

Coil Inside Diameter: 0.079" to 0.354" [2.01 mm to 8.99 mm]

Coil Length: up to 1.26" [32.0 mm]

Can't find it in the catalog? Vishay Dale has the custom capability to design and produce a wide range of magnetic components to your requirements.

POWER TRANSFORMERS

50 to 400 Hz, VA ratings to 100 VA. Specialty models in Low Profile and PC Mount.

INDUCTORS

Inductance values to 20 H, current ratings to 60 amps. Capability of many styles including: Toroidal, Laminated, E Core, Pot Core, Slug Core, Air Core

AUDIO TRANSFORMERS

Coupling Transformers and Hybrid Transformers available in PC Mount, Leadset and Low Profile

TRANSFORMERS

Switching Magnetics, Converter Transformers, Pulse Transformers, High Voltage Transformers



Custom Magnetics Design Form

Circle one: Power Transformer Pulse Transformer Current Sense Transformer Audio Transformer
 Common Mode Inductor Differential Mode Inductor Output/Input Inductor Other

PARAMETER	TYPICAL UNITS	COMMENTS email form to: magnetics@vishay.com
Market:		
Medical		
Commercial		
Industrial		
Military		
Space		
Market locations	USA, Far East, Europe, worldwide	
Cost, Quantity, Schedule:		
Target price at quantity		
Sample quantity		
Production quantity		
Need dates	for samples and production	
Electrical:		
Specify pertinent parameters for each winding		
Primary rated voltage	min./nom./max., V_{peak}/V_{rms}	
Dielectric withstanding voltage	DWV or HiPot (voltage and leakage current at altitude, if critical)	
Operating frequency	minimum, nominal, maximum \pm xx Hz, fixed or variable	
Waveform	sq.wave, push-pull, sinusoidal, etc.	
Primary current	min./nom./max., $I_{peak}/I_{rms}/I_{dc}$ (for inductors)	
Ripple current	esp. for inductors, max., I_{peak} , I_{pk-pk}	
Primary inductance	xx H \pm xx % at xx V_{rms} , I_{dc} Bias (inductors), and xx Hz	
Secondary voltage(s)	min./nom./max., V_{peak}/V_{rms}	
Secondary current(s)	min./nom./max., $I_{peak}/I_{rms}/I_{dc}$ (inductors)	
Load impedance	ohms, if matching transformer	
Regulation	\pm % or xx Volts from no load to full load	
Secondary circuit	half-wave, full-wave, rectifier scheme, etc.	
Schematic	show schematic with polarity and pinout	
Application	buck, flyback, Cuk, half-bridge, pulse, sense, inductor, etc.	
Source impedance	ohms, if matching transformer	
Mechanical:		
Weight	grams or pounds	
Dimensions (L x W x H)	(L x W x H) or (dia. x H)	
Lead breakout		
Terminal type	flex, through-hole, surface mount, etc.	
Winding order	order of windings, interleaving instructions, taps, location on	
Marking	Supplier pn, date code, pin#, etc.	
Mounting configuration	SMT, leaded, chassis, clamped, screw type and locations	
Wire type	specify gage, type of wire (double insulated magnetic wire, Litz	
Insulation Class	NEMA/UL, MilPRF27, etc. (A, B, F, H, etc.)	
Environmental:		
Temperature operating	min. to max., ambient or at coldplate	
Max. temperature operating	internal temperature rise	



Vishay Dale

Custom Design Grid

