

**NEW!**

# SMT Power Inductor

For National Semiconductor  
LM5115 DC Controller IC



The D1787-AL was developed for use with the National Semiconductor LM5115 Secondary Side Post Regulator Controller and LM5025 Primary Side Controller. This flat wire power inductor offers extremely low dc resistance and very high current ratings (up to 23 Arms). The flat core allows for exceptional heat dissipation and provides an excellent surface for pick and place operation.

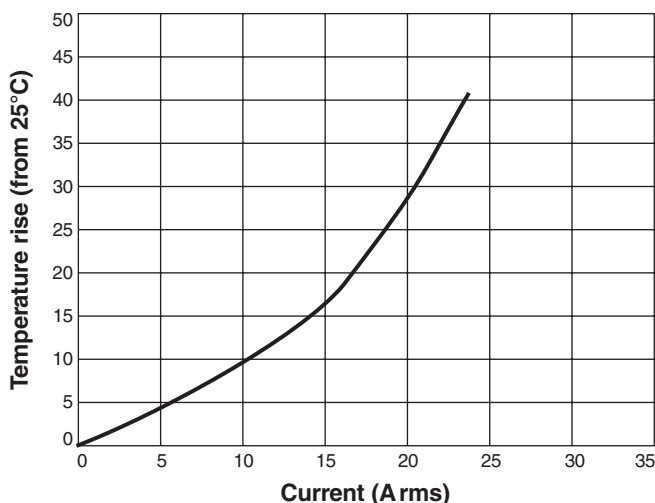
This inductor is ideal for power supply applications where high current handling is essential and is perfect for low-voltage dc-dc converters. Custom inductance values are also possible.

Request free evaluation samples by contacting Coilcraft or visiting [www.coilcraft.com](http://www.coilcraft.com).

Part number	Inductance <sup>1</sup> ±10% (μH)	DCR max (mOhms)	SRF typ <sup>2</sup> (MHz)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)
D1787-AL	33.0	2.8	9.0	8.0	23.0

1. Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc using Coilcraft SMD-D fixture in Agilent/HP 4284A impedance analyzer.
  2. SRF measured using Agilent/HP 8753D network analyzer and Coilcraft SMD-D test fixture.
  3. DC current at which the inductance drops 20% (typ) from its value without current.
  4. Average current for a 40°C rise above 25°C ambient.
  5. Operating temperature range -40°C to +85°C.
  6. Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data.

## Temperature Rise vs Current



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Specifications subject to change without notice.

Please check our website for latest information. Document 484-1 Revised 11/09/06

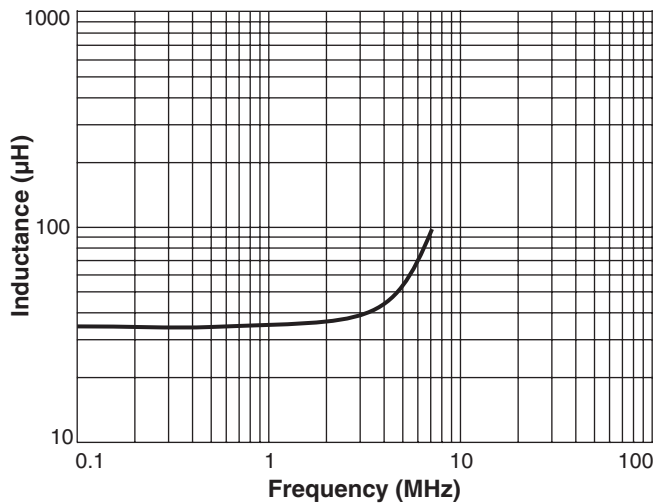
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

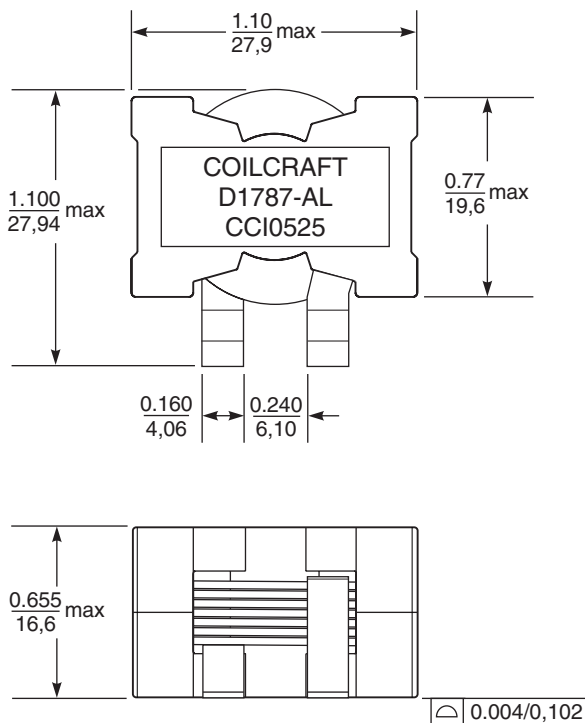
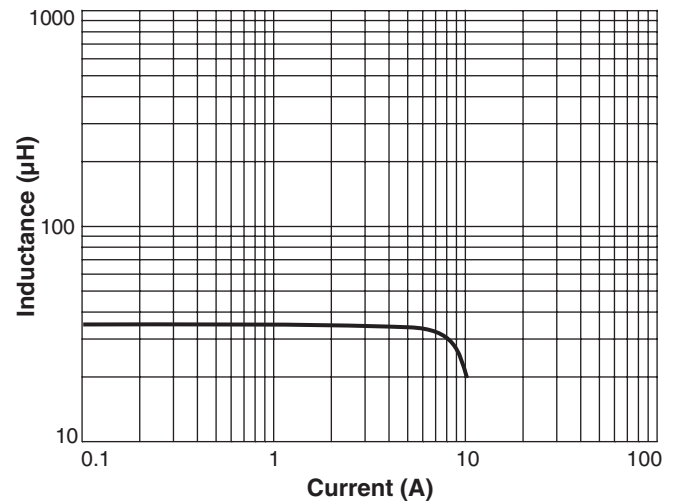
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# SMT Power Inductor - D1787-AL

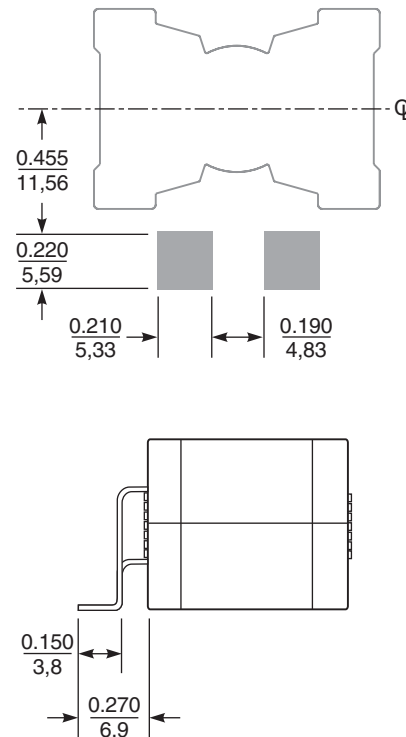
## Typical L vs Frequency



## Typical L vs Current



## Recommended Land Pattern



**Terminations:** Tin-silver over copper  
**Weight:** 34.9 g  
**Packaging:** 25 pieces per tray

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