Data Sheet

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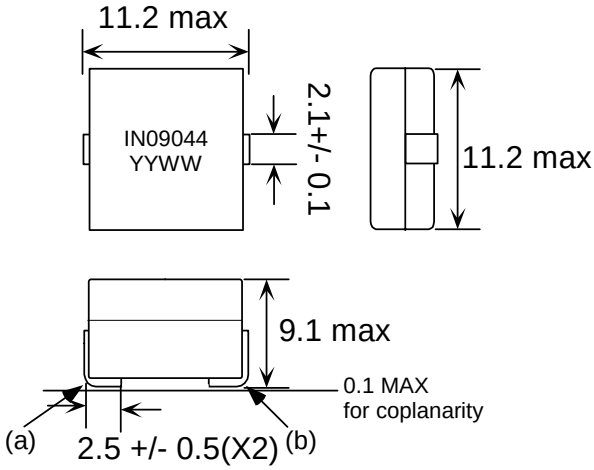
Mechanical Drawing

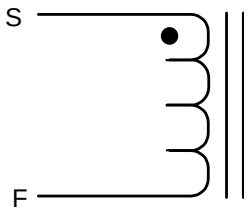


unit:mm

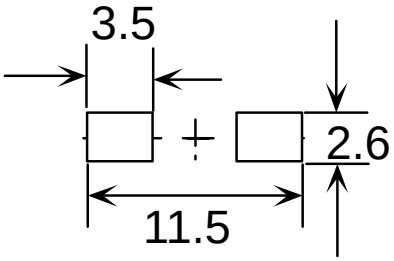
General Information	
Customer	
Part Number	IN09044
Revision	0
Description	Inductor
Date	APR-23-2012
Reference	--
Doc Control #	--
Issue (For ICE use only)	--

Specification				Sample Test Data
Item	***Pins***	***Spec***	***Test Condition***	
Inductance @0Adc	S – F	325 nH +/- 15%	100 kHz, 1Vrms, series	
Inductance @Isat at 25degC	S – F	221 nH min	100 kHz, 1Vrms, series (44 Adc)	
DCR [4]	S – F	0.5 mOhm +/- 10%	+25 deg C	
Isat at 25degC [5]	S – F	44 Adc max		
Isat at 125degC [5]	S – F	35 Adc max		
Idc [6]	S – F	34 Adc max		

Schematic



Recommended PCB Layout



unit:mm

Remark

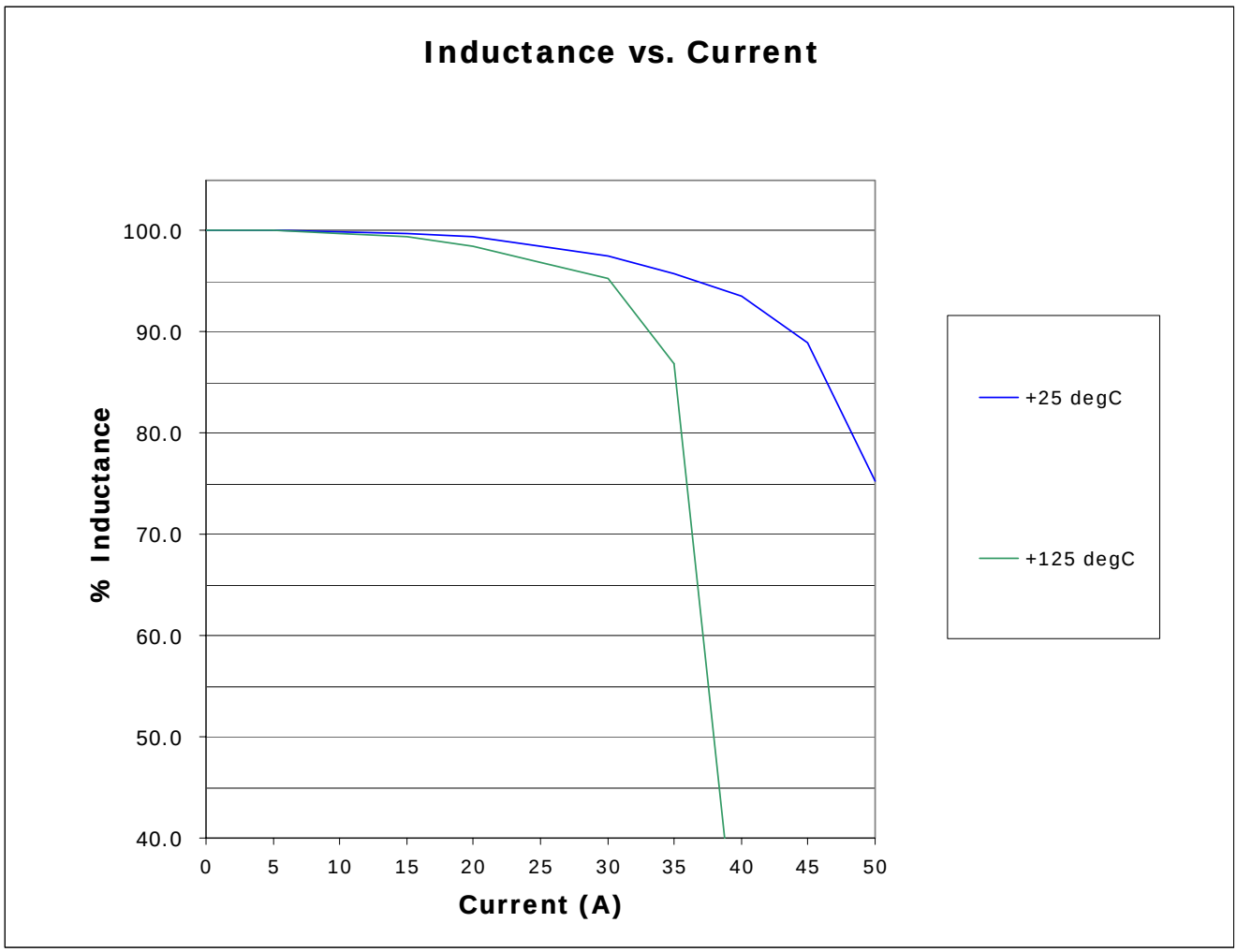
1. This is RoHS compliant product.
2. The operating temperature is -40degC~ +130degC (ambient + temperature rise).
3. Ferrite core material.
4. The nominal DCR is measured from point (a) to point (b), as shown on the mechanical drawing.
5. Isat is the current at which the inductance drops by 20%.
6. Idc is the DC current which causes the part temperature to increase by approximately 40degC. This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes without any forced air cooling.
7. Inductance vs. Current Curve as attached

Sample approval is required before release to production. Sample specifications take precedence over customer specifications.

Customer Signature

Rev.	Description	PRD	CHK	APP	Date	NTFY
0	Initial release	Emily	Gary	L. L. Chou	2010/4/19	2012/4/23

IN09044


Inductance vs. Current
% Inductance
100.0
90.0
80.0
70.0
60.0
50.0
40.0
0
5
10
15
20
25
30
35
40
45
50
Current (A)
+25 degC
+125 degC