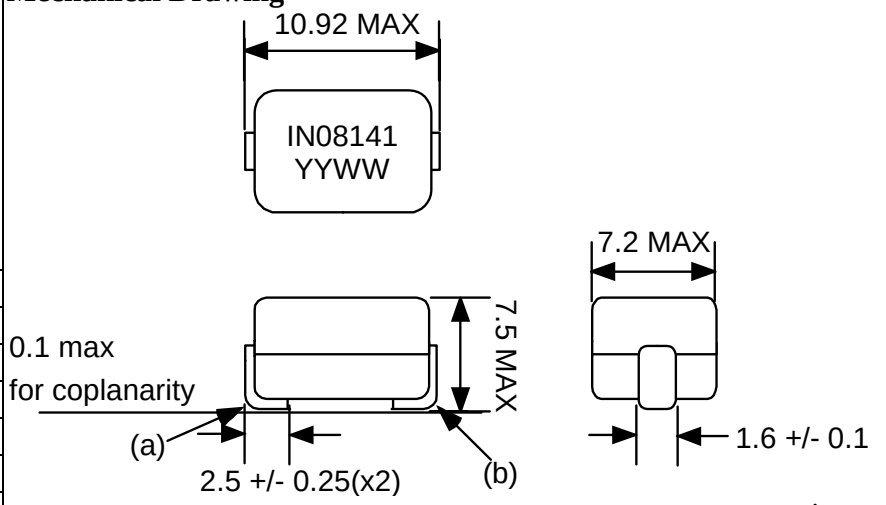
Data Sheet

ICE Components, Inc.
Tel 678-560-9172 Fax 678-560-9304
cust.serv@icecomp.com
www.icecomponents.com
1165 Allgood Rd., Ste. #20, Marietta, GA 30062

General Information

Customer	
Part Number	IN08141
Revision	0
Description	Inductor
Date	JUL-21-2009
Reference	--
Doc Control #	--
Issue (For ICE use only)	--

Mechanical Drawing

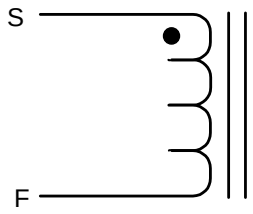


unit:mm

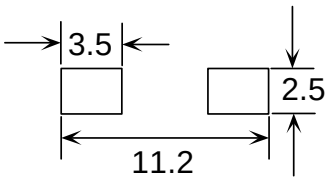
Specification

Item	*Pins*	*Spec*	*Test Condition*	Sample Test Data
Inductance @0Adc	S - F	510 nH +/- 15%	100 kHz, 1Vrms, series	
Inductance @Isat at 25degC	S - F	347 nH min	100 kHz, 1Vrms, series (17 Adc)	
DCR	S - F	0.47 mOhm +/- 10%	+25 deg C	
Isat at 25degC	S - F	17 Adc max		
Isat at +125degC	S - F	14 Adc max		
Idc	S - F	39 Adc max		

Schematic



Recommended PCB Layout



unit:mm

Remark

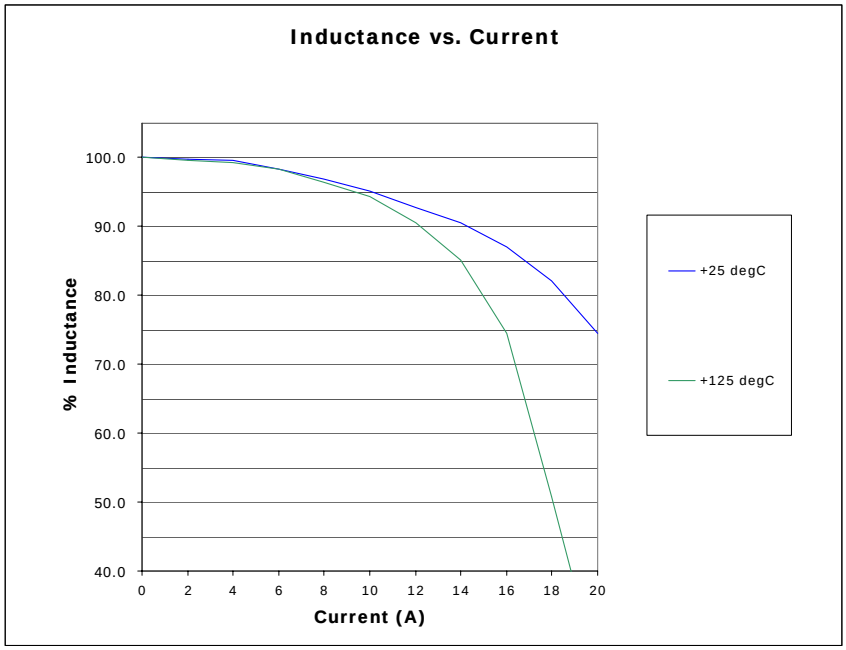
1. Isat is the current at which the inductance drops by 20%.
2. Idc is the current at which the temperature of the part increases by 50 deg C.
3. Inductance vs. Current Curve, Temperature vs. Current Curve and DCR vs. temperature Curve as attached.
4. The nominal DCR is measured from point (a) to point (b), as shown on the mechanical drawing.
5. This is RoHS compliant product.
6. The max operating temperature is 130degC (ambient + temperature rise).

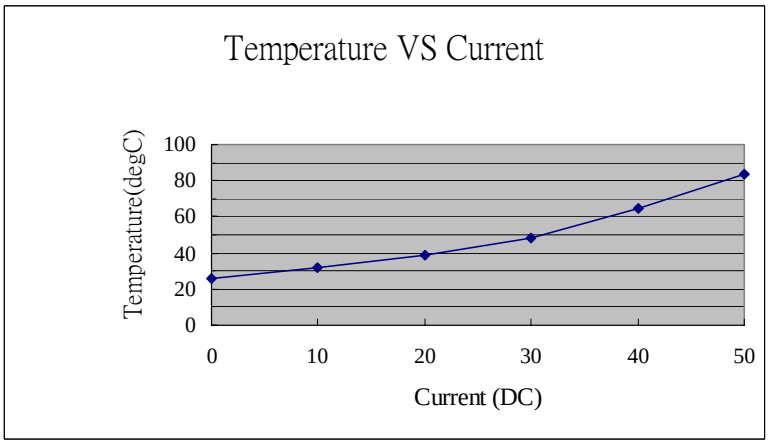
Sample approval is required before release to production. Sample specifications take precedence over customer specifications.

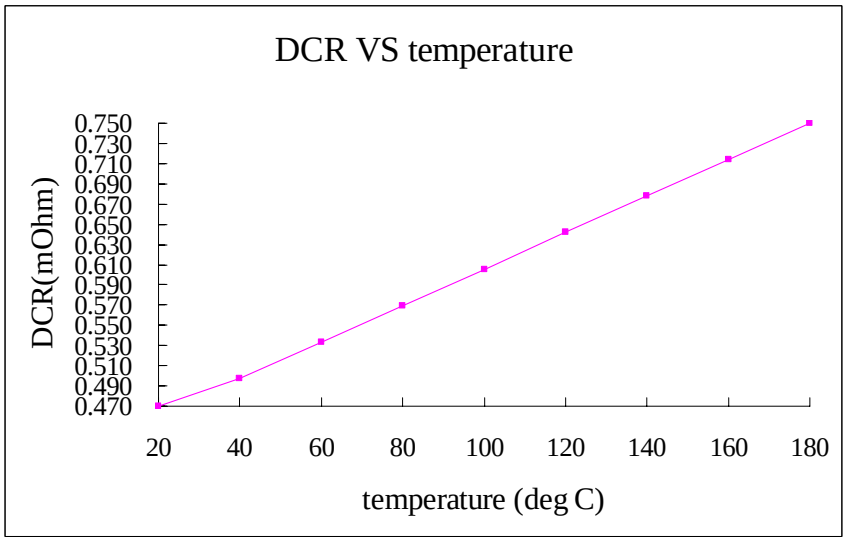
Customer Signature

Rev.	Description	PRD	CHK	APP	Date	NTFY
0	Initial release	Emily	Gary	L. L. Chou	2009/7/21	2009/7/21

P/N: IN08141


Inductance vs. Current
% Inductance
100.0
90.0
80.0
70.0
60.0
50.0
40.0
0
2
4
6
8
10
12
14
16
18
20
Current (A)
+25 degC
+125 degC


Temperature VS Current
Temperature(degC)
100
80
60
40
20
0
0
10
20
30
40
50
Current (DC)


DCR VS temperature
DCR(mOhm)
0.750
0.730
0.710
0.690
0.670
0.650
0.630
0.610
0.590
0.570
0.550
0.530
0.510
0.490
0.470
20
40
60
80
100
120
140
160
180
temperature (deg C)