Data Sheet

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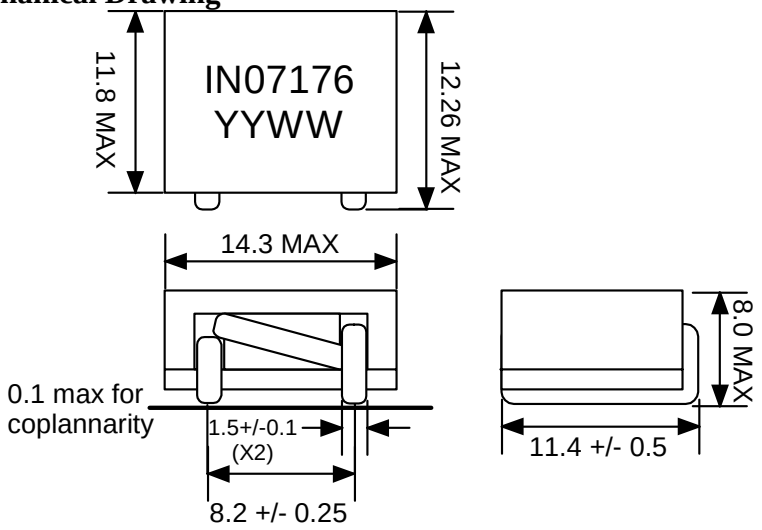
General Information	
Customer	
Part Number	IN07176
Revision	0
Description	Inductor
Date	AUG-07-2009
Reference	--
Doc Control #	--
Issue (For ICE use only)	--

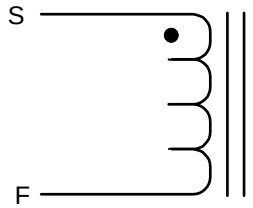
Mechanical Drawing



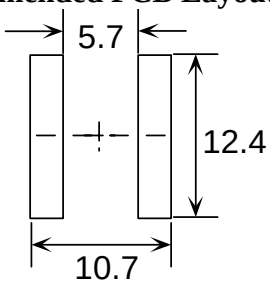
unit:mm

Specification				Sample Test Data
Item	***Pins***	***Spec***	***Test Condition***	
Inductance @0Adc	S - F	510 nH +/- 10%	500 kHz, 1Vrms, series	
Inductance @Isat at 25degC	S - F	380 nH min	500 kHz 1Vrms, series (45 Adc)	
DCR	S - F	0.6 mOhm +/- 10%	+25 deg C	
Isat at 25degC	S - F	45 Adc max		
Isat at +125degC	S - F	36 Adc max		
Idc	S - F	29 Adc max		

Schematic



Recommended PCB Layout



unit:mm

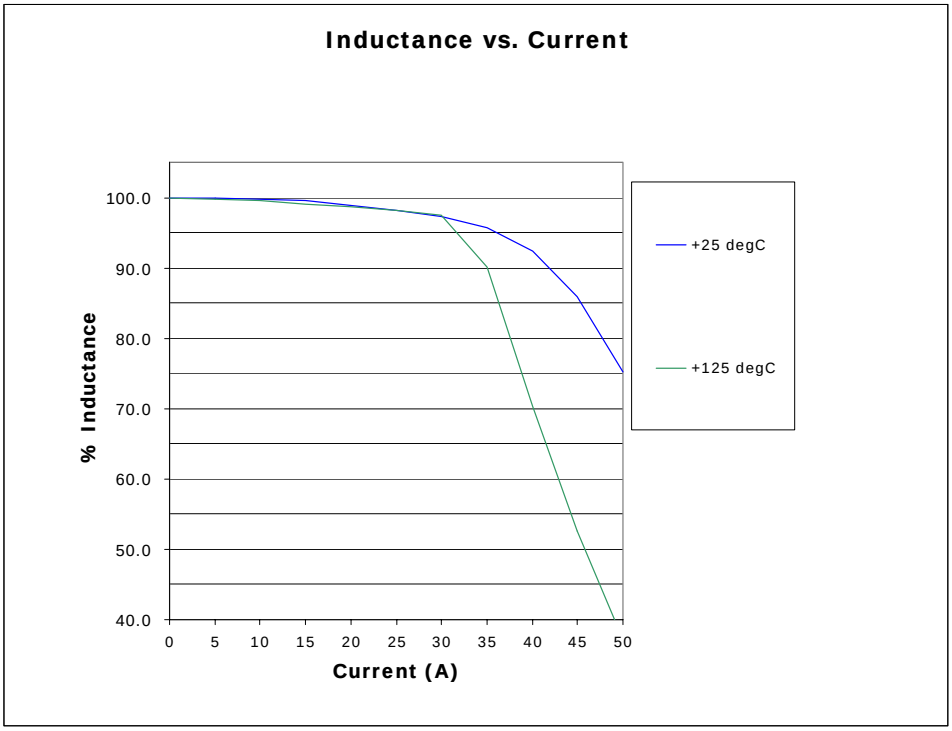
Remark

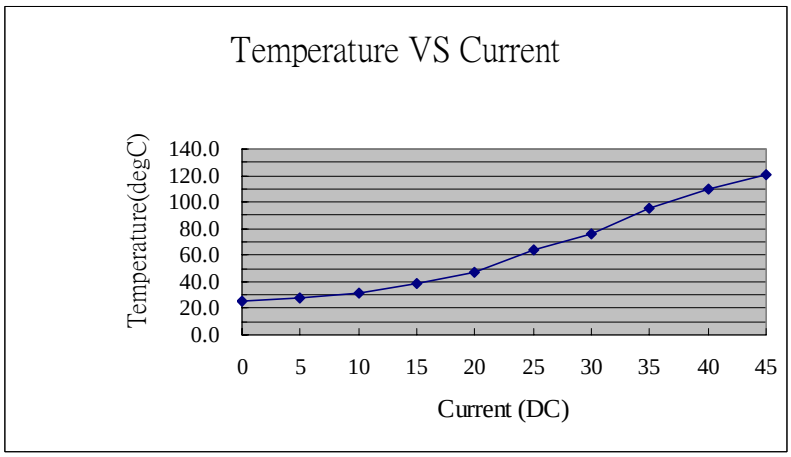
1. Isat is the current at which the inductance drops by 15%.
2. Idc is the current at which the temperature of the part increases by 50 deg C.
3. This is RoHS compliant product.
4. The max operating temperature is 130degC (ambient + temperature rise).
5. Inductance vs. Current Curve, Temperature vs. Current Curve and Temperature vs. DCR as attached.

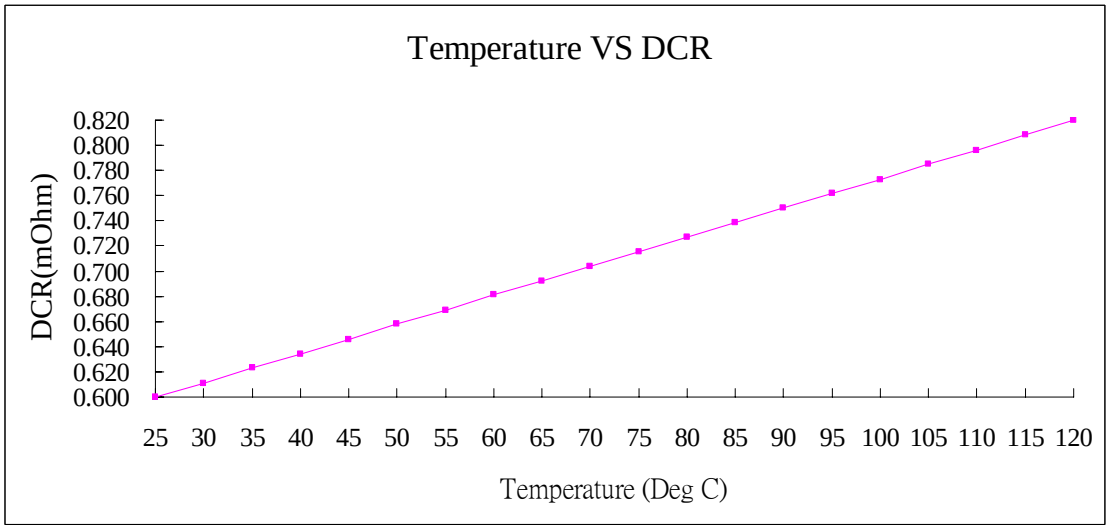
Sample approval is required before release to production. Sample specifications take precedence over customer specifications.

Customer Signature

Rev.	Description	PRD	CHK	APP	Date	NTFY
0	Initial release	Emily	Gary	L. L. Chou	2009/8/7	2009/8/7


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


Temperature VS Current
Temperature(degC)
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
0 5 10 15 20 25 30 35 40 45
Current (DC)


Temperature VS DCR
DCR(mOhm)
0.820
0.800
0.780
0.760
0.740
0.720
0.700
0.680
0.660
0.640
0.620
0.600
25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120
Temperature (Deg C)