

Coilmaster



RoHS Compliant

SPECIFICATION APPROVAL

CUSTOMER : Ozdisan

PRODUCT : RCB0810HP-1R5M-LF

Pb-free

CODE NO. : C04408265

CUS. CODE :

SPEC.NO. : C-4408-265(00)

DATE : 4-Aug-15

CUSTOMER APPROVAL

Coilmaster Electronics Co., Ltd.

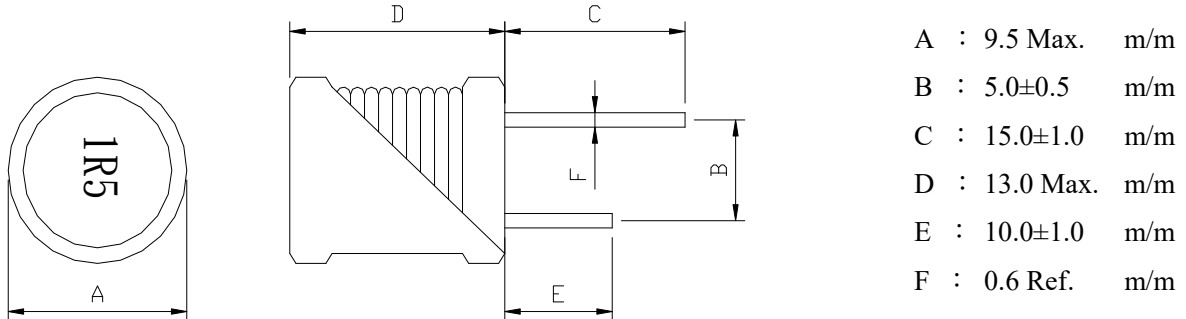
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PREPARED BY	APPROVED BY	AUTHORIZED BY
JEAN	TONY	MASCOT

PRODUCT	RCB0810HP-1R5M-LF	COIL SPECIFICATION	DATE	2015/8/4
SPEC.NO.	C-4408-265(00)		CODE NO.	C04408265

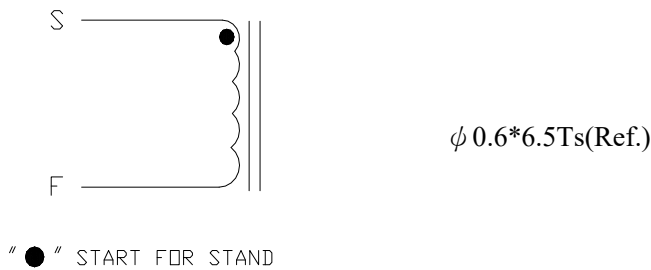
EXTERNAL DIMENSIONS :



ELECTRICAL CHARACTERISTIC :

L(uH) :	1.5±20%	796KHz	WITH PET TUBE
DCR(mΩ) :	23	Max.	
IDC(A) :	7.6	Max. (L7.6A MAX ≥ 0Ax90%)	
INDUCTANCE DROP :	10% Typ. @ IDC	7.6 A	
Operating Temperature Range :	- 40°C ~ +125°C		

SCHEMATIC DRAWING :



MATERIAL LIST :

NO	ITEM	MATERIAL	SUPPLIER OF THE MATERIAL
1	CORE	F4D DR2W7.8*10(SW) B5.5 F5.5 P5	
2	WIRE	φ0.60 UEF1/U(180°C)	ELEKTRISOLA
3	TUBE	PETφ9*14±0.3mm-0-N	
4	CLEANSER	XD-709A	

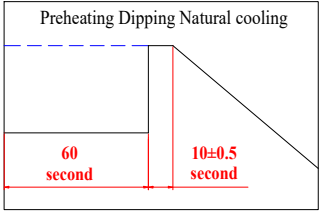
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TEST DATA

ELECTRICAL CHARACTERISTICS								
MEAS. ITEM	L(uH)	DCR(mΩ)	IDC(A)					
TEST FREQ.	796KHz	Max.	Max.					
YOUR			L(7.6A)					
SPEC.	1.5±20%	23	≥ 0Ax90%					
1	1.52	8.46	1.49					
2	1.50	8.24	1.49					
3	1.48	8.27	1.45					
4	1.45	8.23	1.42					
5	1.47	7.92	1.44					
6	1.52	7.85	1.50					
7	1.53	8.39	1.50					
8	1.48	8.42	1.47					
9	1.46	8.36	1.43					
10	1.50	8.24	1.47					
X	1.491	8.238	1.466					
R	0.08	0.61	0.08					

DIMENSION								
MEAS. ITEM	A	B	C	D	E			
TEST FREQ.	m/m	m/m	m/m	m/m	m/m			
YOUR								
SPEC.	9.5 Max.	5.0±0.5	15.0±1.0	13.0 Max.	10.0±1.0			
1	8.30			10.50				
2	8.32			10.60				
3	8.35			10.55				
4	8.40			10.56				
5	8.33			10.56				
6	8.32			10.55				
7	8.30			10.62				
8	8.32			10.61				
9	8.31			10.52				
10	8.32			10.55				
X	8.327	#DIV/0!	#DIV/0!	10.562	#DIV/0!			
R	0.10	0.00	0.00	0.12	0.00			

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TEST ITEMS	SPECIFICATIONS	TEST CONDITIONS / TEST METHODS		
<u>ELECTRICAL PERFORMANCE TEST</u>				
L	REFER TO STANDARD ELEC-TRICAL CHARACTERISTIC LIST.	CH-1061 OR EQUIV.		
DCR		CH-502A OR EQUIV		
RATED CURRENT		APPLIED THE CURRENT TO COILS THE INDUCTANCE CHANGE SHOULD BE LESS THAN 10% TO INITIAL VALUE AND TEMPERATURE RISE SHOULD NOT BE MORE THAN 40°C..		
TEMPERATURE RISE TEST	40°C MAX (Δt)	1. APPLIED THE ALLOWED DC CURRENT FOR 4 HOURS. 2. TEMPERATURE MEASURE BY DIGITAL SURFACE THERMOMETER.		
OVER LOAD TEST	NO EVIDENCE OF ELECTRICAL DAMAGE	APPLIED 1.5 TIMES OF RATED ALLOWED DC CURRENT TO INDUCTORS FOR A PERIOD OF 5 MINUTES.		
<u>MECHANICAL PERFORMANCE TEST</u>				
SOLDER HEAT RESISTANCE	1. INDUCTORS SHOULD HAVE NO EVIDENCE OF ELECTRICAL AND MECHANICAL DAMAGE 2. INDUCTANCE SHOULD NOT CHANGE MORE THAN $\pm 10\%$ 3. SOLDER MATERIAL WILL BE LEAD FREE.	PREHEAT: 150°C 60SECS		
		SOLDER TEMPERATURE: 255 \pm 5°C		
		FLUX: ROXIN.. A		
VIBRATION TEST (LOW FREQUENCY)				
SHOCK TEST		1.AMPLITUDE: 1.5 mm 2.FREQUENCY: 10-55-10HZ / 1 MIN 3.DIRECTION: X, Y, Z 4.DURATION: 2 HRS/X, Y, Z		
		INDUCTORS SHOULD BE DROPPED 10 TIMES FROM A HEIGHT OF 1m ONTO 3cm WOODEN BOARD.		

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TEST ITEMS	SPECIFICATIONS	TEST CONDITIONS / TEST METHODS
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CLIMATIC TEST

TEMPERATURE CHARACTERISTIC	1.APPEARANCE:NO DAMAGE 2.INDUCTANCE:WITHIN±10% OF INITIAL VALUE.	- 40°C ~ +125°C	
HUMIDITY TEST		60°C±2°C / 96±2 HOURS	
LOW TEMPERATURE STORAGE		1.TEMPERATURE:- 25°C±2°C 2.TIME: 96±2 HOURS	
THERMAL SHOCK TEST		1.-25±5°C FOR 30 MINUTES. +80±5°C FOR 30 MINUTES. 2.TOTAL: 10 CYCLES	
HIGH TEMPERATURE STORAGE		1.APPLIED CURRENT: MAX RATED CURRENT 2.TEMPERATURE:80°C±2°C	

NOTE : INDUCTORS ARE TO BE TESTED AFTER 2 HOUR AT ROOM TEMPERATURE.

LIFE TEST

HIGH TEMPERATURE LOAD LIFE TEST	INDUCTORS SHOULD BE NO EVIDENCE OF SHORT OR OPEN CIRCUIT	1. TEMPERATURE: 80±2°C 2. TIME: 500±12 HOURS 3. LOAD: ALLOWED DC CURREN
HUMIDITY LOAD LIFE TEST		1. TEMPERATURE: 60±2°C 2. R.H.: 90-95% 3. TIME: 500±12 HOURS 4. LOAD: ALLOWED DC CURREN

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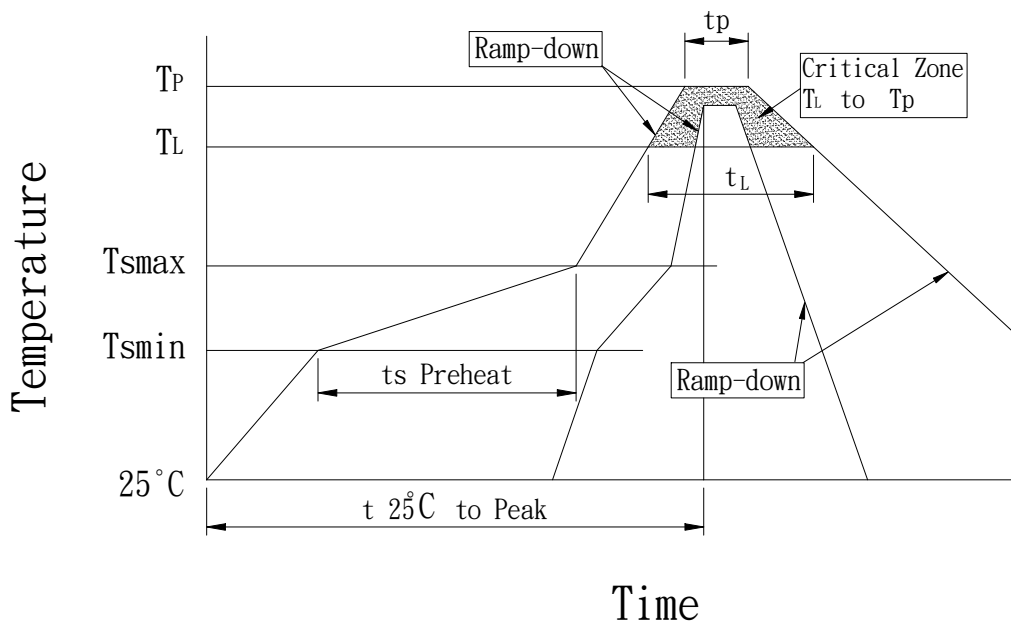
RECOMMENDED SOLDERING CONDITIONS :

CLASSIFICATION REFLOW PROFILES

Profile Feature	Sn-Pb Eutectic Assembly		Pb-Free Assembly	
	Large Body	Small Body	Large Body	Small Body
Average ramp-up rate (T_L to T_P)	3°C/second max.		3°C/second max.	
Preheat				
-Temperature Min ($T_{s_{min}}$)	100°C		150°C	
-Temperature Min ($T_{s_{max}}$)	150°C		200°C	
-Time (min to max) (ts)	60-120 seconds		60-180 seconds	
$T_{s_{max}}$ to T_L				
-Ramp-up Rate			3°C/second max.	
Time maintained above:				
-Temperature (T_L)	183°C		217°C	
-Time (t_L)	60-150 seconds		60-150 seconds	
Peak Temperature (T_P)	225 +0/-5°C	240 +0/-5°C	245 +0/-5°C	255 +5/-5°C
Time within 5°C of actual Peak Temperature (t_p)	10-30 seconds	10-30 seconds	10-30 seconds	20-40 seconds
Ramp-down Rate	6°C/second max.		6°C/second max.	
Time 25°C to Peak Temperature	6 minutes max.		8 minutes max.	

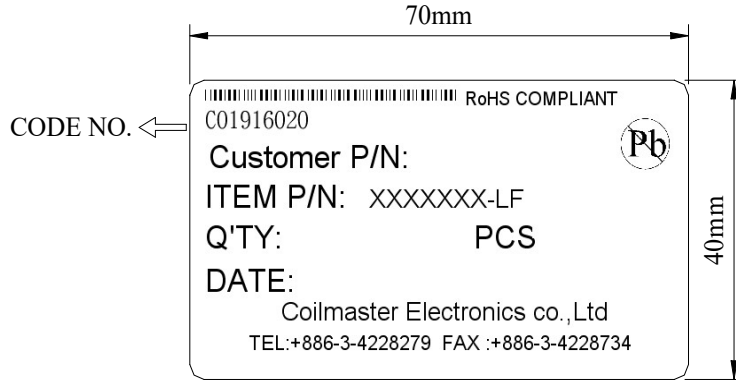
Note : All temperatures refer to top side of the package. Measured on the package body surface.

REFLOW SOLDERINGS



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TABLE :



INNER BOX LABEL



OUT BOX LABEL

COILMASTER ELECTRONICS CO., LTD.