

# Coilmaster



RoHS Compliant

## SPECIFICATION APPROVAL

CUSTOMER : SEA

PRODUCT : RCB0608P-183K-LF

MATERIAL : Pb-free

CODE NO. : C04406050

CUS. CODE :

SPEC.NO. : C-4406-050(00)

CUSTOMER APPROVAL

**Coilmaster Electronics Co., Ltd.**

9F-3,NO.398 HUAN BEI ROAD, CHUNG-LI CITY

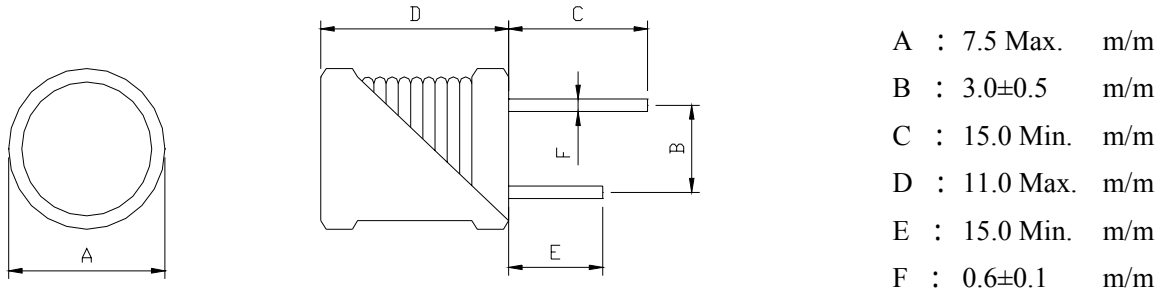
TAOYUAN HSIEN, TAIWAN, R.O.C.

TEL : (886)34228279 FAX : (886)34228734

PREPARED BY	APPROVED BY	AUTHORIZED BY
JEAN	TONY	MASCOT

<b>CUSTOMER</b>	SEA	<b>COIL SPECIFICATION</b>	<b>SPEC. NO.</b>	C-4406-050(00)
<b>CUS. P/N</b>			<b>CODE NO.</b>	C04406050
<b>PRODUCT</b>	RCB0608P-183K-LF		<b>DATE</b>	11/16/05

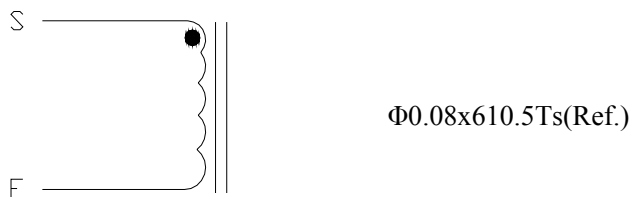
**EXTERNAL DIMENSIONS :**



**ELECTRICAL CHARACTERISTIC :**

L(mH) : 18±10% 1KHz / 0.1V WITH PVC TUBE  
 RDC(Ω) : 56 Max.  
 IDC(mA) : 19 Max. ( L19m A MAX 0Ax90% )  
 INDUCTANCE DROP : 10% MAX @ IDC 19mA

**SCHEMATIC DRAWING :**



**MATERIAL LIST :**

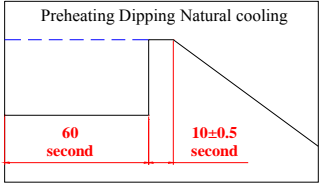
NO	DESCRIPTION	MATERIAL	SUPPLIER	UL NO
1	CORE	P3B DR2W6x8 F B2.5 F4 P2.6	HORNG YEI CO.,LTD	
2	WIRE	2UEW 130	PACIFIC ELECTRONIC WIRE&CABLE CO.,LTD OR EQUIVALEM	
3	TUBE	PVC(BLACK)	CHANG BAO CO.,LTD	

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**TEST DATA**

ELECTRICAL CHARACTERISTICS				DIMENSION			
MEAS. ITEM	L(mH)	DCR( $\Omega$ )	IDC(A)	A	B	C	D
TEST FREQ.	1KHz / 0.1V	Max.	Max.	m/m	m/m	m/m	m/m
YOUR			L(19mA)				
SPEC.	18 $\pm$ 10%	56	0Ax90%	7.5 Max.	3.0 $\pm$ 0.5	15.0 Min.	11.0 Max.
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
X	#DIV/0!	#DIV/0!					
R	0.000	0.000					

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TEST ITEMS	SPECIFICATIONS	TEST CONDITIONS / TEST METHODS		
<b><u>ELECTRICAL PERFORMANCE TEST</u></b>				
L	REFER TO STANDARD ELECTRICAL 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 ..		
TEMPERATURE RISE TEST	40 MAX ( t )	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.		
<b><u>MECHANICAL PERFORMANCE TEST</u></b>				
SOLDER HEAT RESISTANCE	1. INDUCTORS SHOULD HAVE NO EVIDENCE OF ELECTRICAL AND MECHANICAL DAMAGE 2. INDUCTANCE SHOULD NOT CHANGE MORE THAN ±10% 3. SOLDER MATERIAL WILL BE LEAD FREE.	PREHEAT: 150 60SECS		
VIBRATION TEST (LOW FREQUENCY)		SOLDER TEMPERATURE: 255±5		
		 <p>FLUX: ROXIN..</p> <p>DIP TIME: 10±0.5SECS.</p>		
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.APEARANCE:NO DAMAGE 2.INDUCTANCE:WITHIN±10% OF INITIAL VALUE.	- 40 ~ +85	
HUMIDITY TEST		60 ±2 / 96±2 HOURS	
LOW TEMPERATURE STORAGE		1.TEMPERATURE:- 25 ±2 2.TIME: 96±2 HOURS	
THERMAL SHOCK TEST		1.-25±5 FOR 30 MINUTES. +80±5 FOR 30 MINUTES. 2.TOTAL: 10 CYCLES	
HIGH TEMPERATURE STORAGE		1.APPLIED CURRENT: MAX RATED CURRENT 2.TEMPERATURE:80 ±2	

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 2. TIME: 500±12 HOURS 3. LOAD: ALLOWED DC CURREN
HUMIDITY LOAD LIFE TEST		1. TEMPERATURE: 60±2 2. R.H.: 90-95 % 3. TIME: 500±12 HOURS 4. LOAD: ALLOWED DC CURREN

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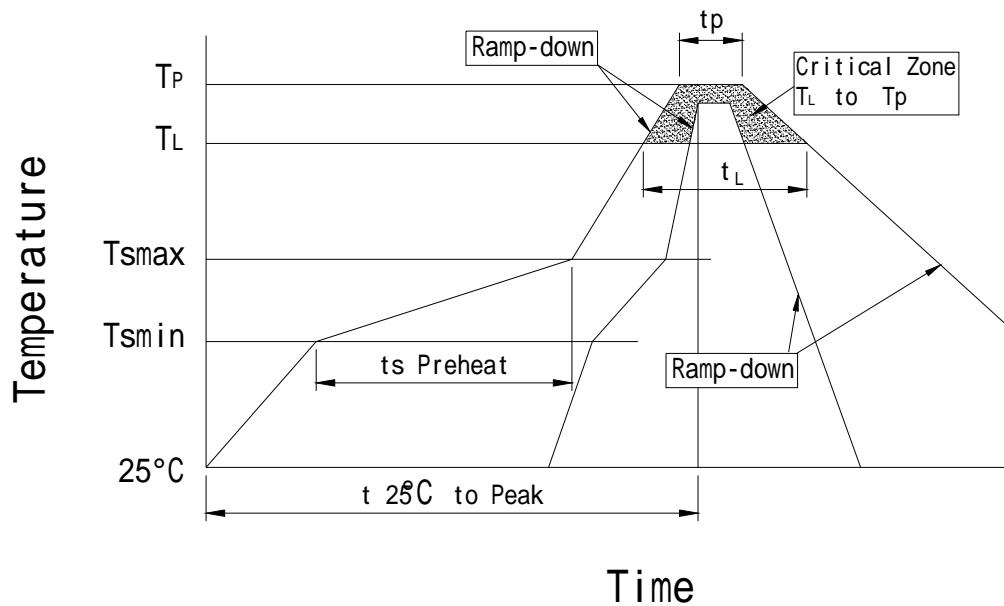
**RECOMMENDED SOLDERING CONDITIONS :**

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 Max ( $T_{s_{max}}$ )	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.	

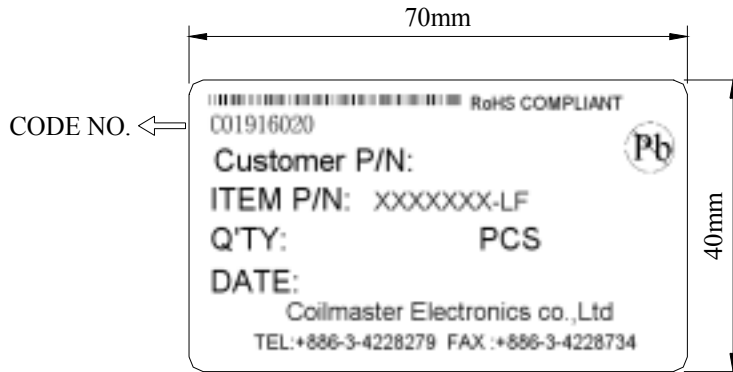
Note : All temperatures refer to top side of the package. Measured on the package body surface.

REFLOW SOLDERINGS

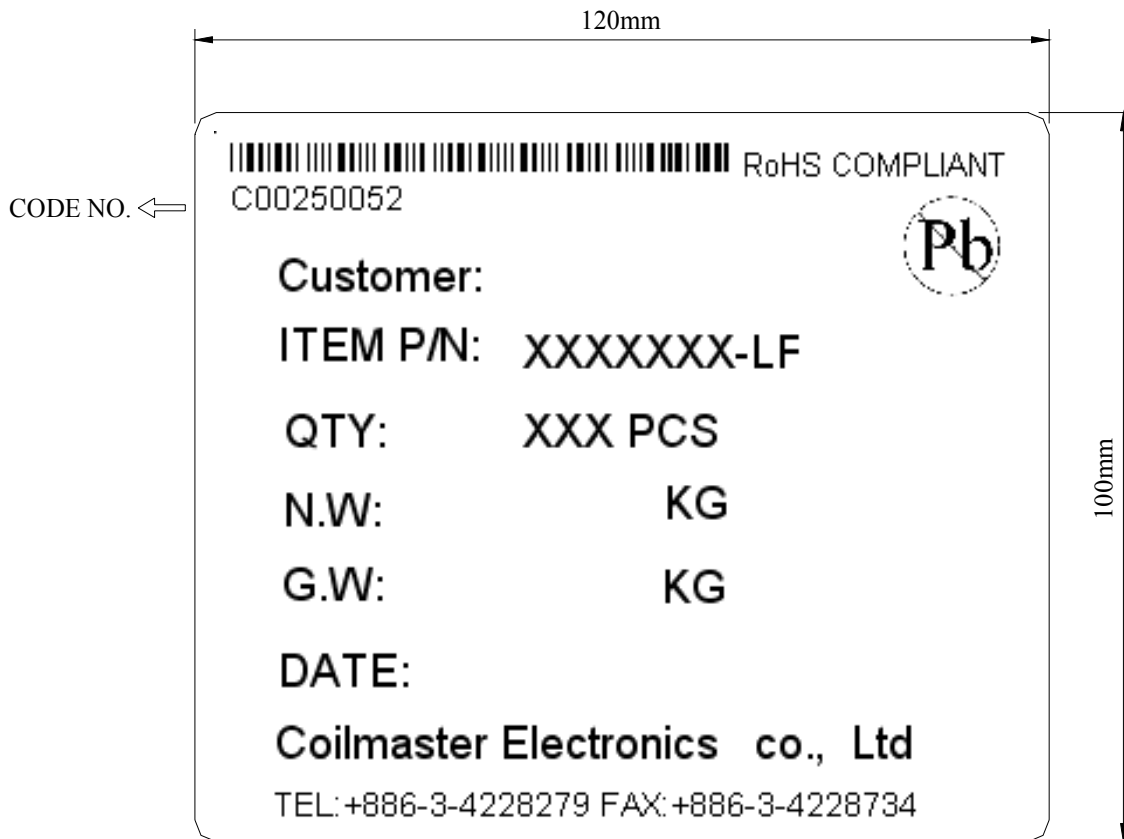


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**TABLE :**



INNER BOX LABEL



OUT BOX LABEL

**COILMASTER ELECTRONICS CO., LTD.**