



Coilmaster



RoHS Compliant

SPECIFICATION APPROVAL

CUSTOMER : Ozdisan

PRODUCT : RCB1415U-301K-LF

MATERIAL : Pb-free

CODE NO. : C04414032

CUS. CODE :

SPEC.NO. : C-4414-032(01)

DATE : 5-Feb-21

CUSTOMER APPROVAL

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Coilmaster Electronics Co., Ltd.

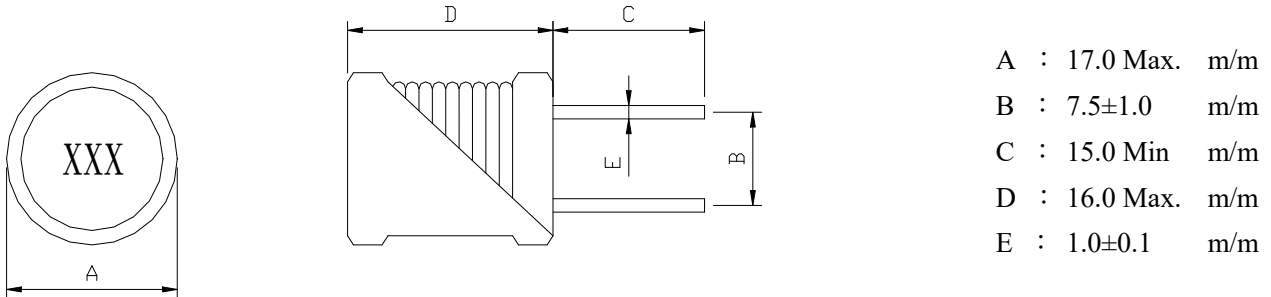
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PREPARED BY	APPROVED BY	AUTHORIZED BY
JEAN	TONY	MASCOT

PRODUCT	RCB1415U-301K-LF	COIL SPECIFICATION	DATE	2021/2/5
SPEC.NO.	C-4414-032(01)		CODE NO.	C04414032

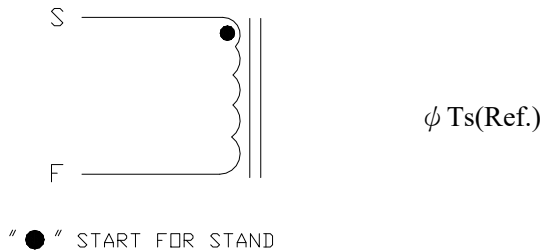
EXTERNAL DIMENSIONS :



ELECTRICAL CHARACTERISTIC :

L(uH) : 300±10% 10KHz 0.25V WITH UL TUBE
 RDC(Ω) : 0.28 Max.
 IDC(A) : 3.0 Max. (L3.0A MAX ≥0Ax80%)
 INDUCTANCE DROP :20% MAX @ IDC 3.0 A

SCHEMATIC DRAWING :



MATERIAL LIST :

NO	ITEM	MATERIAL	SUPPLIER OF THE MATERIAL
1	CORE	P3B DR2W14*15RF B=7 F=10 P=10	
2	WIRE	76.5TS	
3	TUBE		

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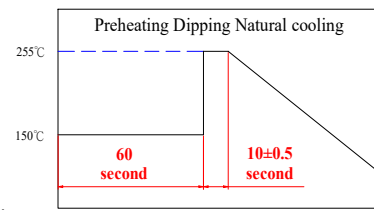
TEST DATA

ELECTRICAL CHARACTERISTICS							
MEAS. ITEM	L(μH)	DCR(Ω)	IDC(A)				
TEST FREQ.	10KHz 0.25V	Max.	Max.				
YOUR			L(2.7A)				
SPEC.	300±10%	0.28	≧ 0Ax80%				
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
X	#DIV/0!	#DIV/0!	#DIV/0!				
R	0.00	0.00	0.00				

DIMENSION							
MEAS. ITEM	A	B	C	D	E		
TEST FREQ.	m/m	m/m	m/m	m/m	m/m		
YOUR							
SPEC.	17.0 Max.	7.5±1.0	15.0 Min	16.0 Max.	1.0±0.1		
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
X	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
R	0.00	0.00	0.00	0.00	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 IDUCTANCE CHANGE SHOULD BE LESS THAN 10% TO INITIAL VALUE AND TEMPERATURE RISE SHOULD NOT BE MORE THAN 40°C..		
TEMPERATURERISE 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 ELEC- TRICAL AND MICHANICAL DAMAGE 2. INDUCTANCE SHOULD NOT HANGE MORE THAN $\pm 10\%$ 3. SOLDER MATERIAL WILL BE LEAD FREE.	PREHEAT:150°C 60SECS		
VIBRATION TEST (LOW FREQUENCY)		SOLDER TEMPERATURE: 255 ± 5 °C FLUX: ROXIN.. DIP TIME:10 ± 0.5 SECS.		
SHOCK TEST		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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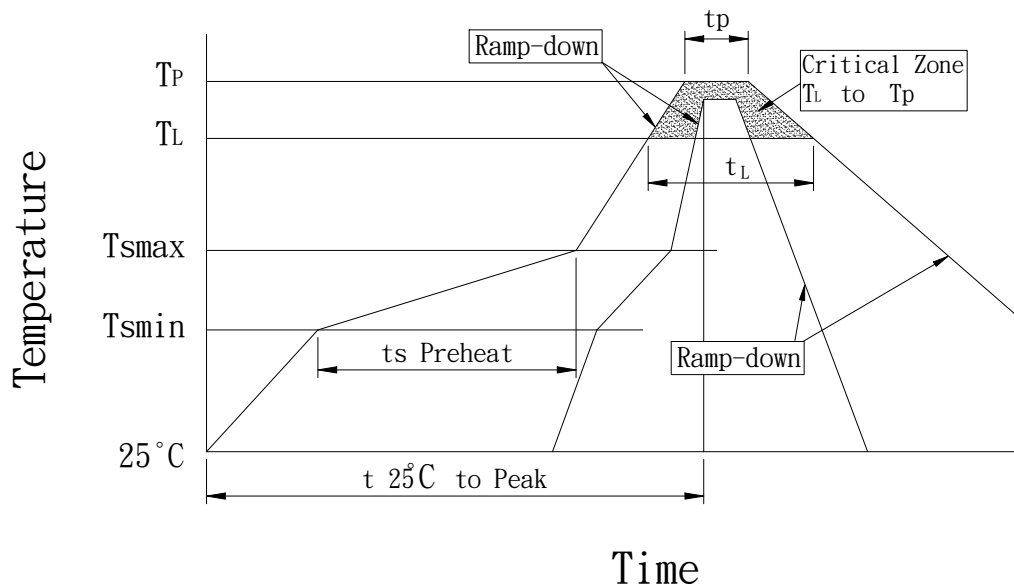
RECOMMENDED SOLDERING CONDITIONS :

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_{smin})	100°C		150°C	
-Temperature Min (T_{smax})	150°C		200°C	
-Time (min to max) (ts)	60-120 seconds		60-180 seconds	
T_{smax} 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 topside of the package. Measured on the package body surface.

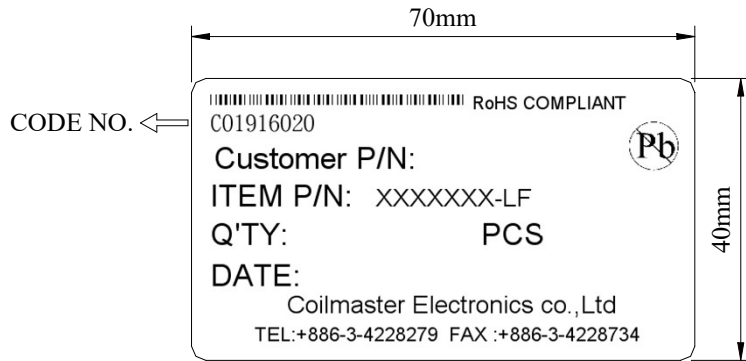
REFLOW SOLDERINGS



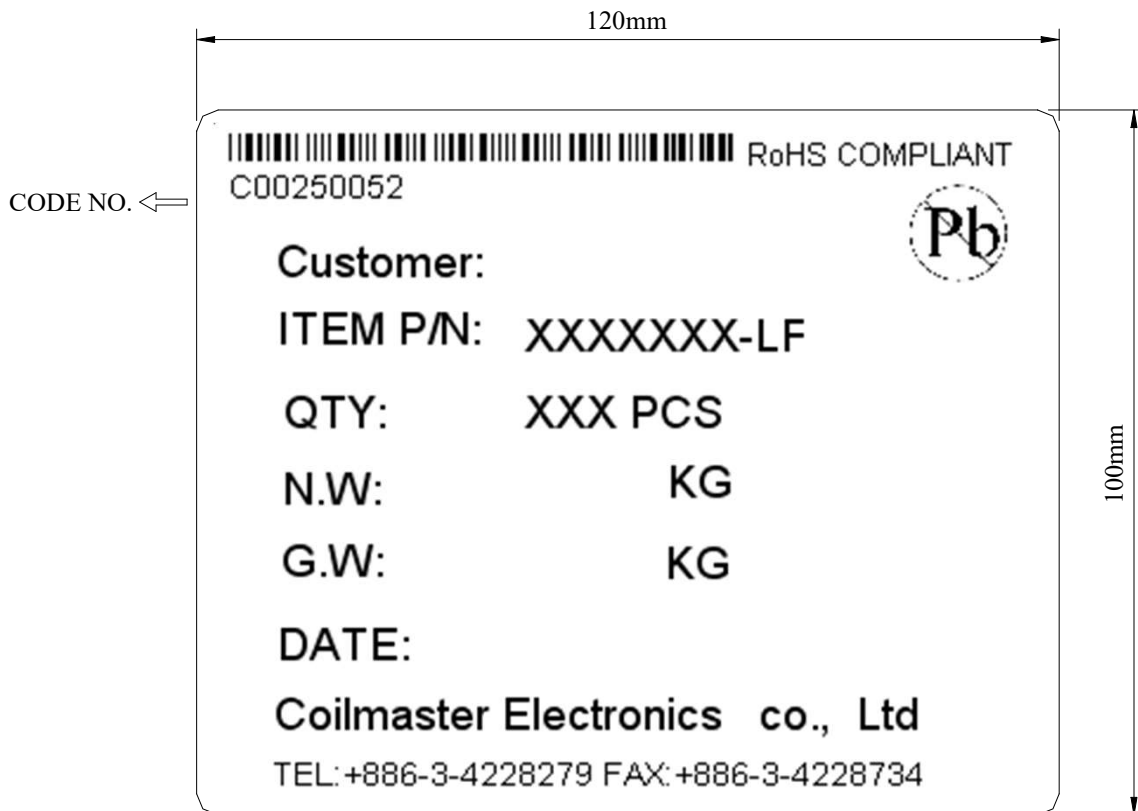
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TABLE :



INNER BOX LABEL



OUT BOX LABEL

COILMASTER ELECTRONICS CO., LTD.