



Coilmaster



RoHS Compliant

SPECIFICATION APPROVAL

CUSTOMER : Ozdisan

PRODUCT : AL0412-101K-LF

Pb-free

CODE NO. : C03604106

CUS. CODE :

SPEC.NO. : C-3604-106(00)

DATE : 2-Oct-14

CUSTOMER APPROVAL

Coilmaster Electronics Co., Ltd.

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

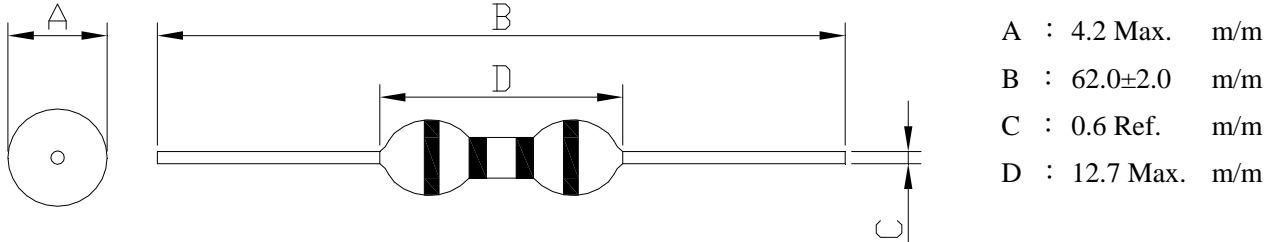
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PREPARED BY	APPROVED BY	AUTHORIZED BY
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PRODUCT	AL0412-101K-LF	COIL SPECIFICATION	DATE	2014/10/2
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EXTERNAL DIMENSIONS :



ELECTRICAL CHARACTERISTIC :

L(μH) :	100±10%	1KHz
SRF(Min.) :	3.9	MHz
DCR(Ω) :	0.67	Max.
IDC(mA) :	300	Max.

TEST DATA

ELECTRICAL CHARACTERISTICS				DIMENSION			
MEAS. ITEM	L(μH)	DCR(Ω)	IDC(mA)	A	B	C	D
TEST FREQ.	1KHz	Max.	Max.	m/m	m/m	m/m	m/m
YOUR							
SPEC.	100±10%	0.670	300	4.2 Max.	62.0±2.0	0.6 Ref.	12.7 Max.
1	99.50	0.56					
2	99.40	0.51					
3	98.20	0.53					
4	98.40	0.52					
5	99.60	0.52					
6	98.70	0.54					
7	99.40	0.53					
8	99.80	0.53					
9	98.80	0.52					
10	98.90	0.54					
X	99.07	0.53					
R	1.60	0.05					

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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 25% 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± 10% 3. SOLDER MATERIAL WILL BE LEAD FREE.	PREHEAT:150°C 60SECS		
VIBRATION TEST (LOW FREQUENCY)		SOLDER TEMPERATURE: 255±5°C		
SHOCK TEST		FLUX: ROXIN.. DIP TIME:10±0.5SECS.		
		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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<u>CLIMATIC TEST</u>				
TEMPERATURE CHARACTERISTIC	1.APPEARANCE:NO DAMAGE 2.INDUCTANCE:WITHIN±10% OF INITIAL VALUE.	- 40°C ~ +105°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 <div style="text-align: right;"> </div>		
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.				
<u>LIFE TEST</u>				
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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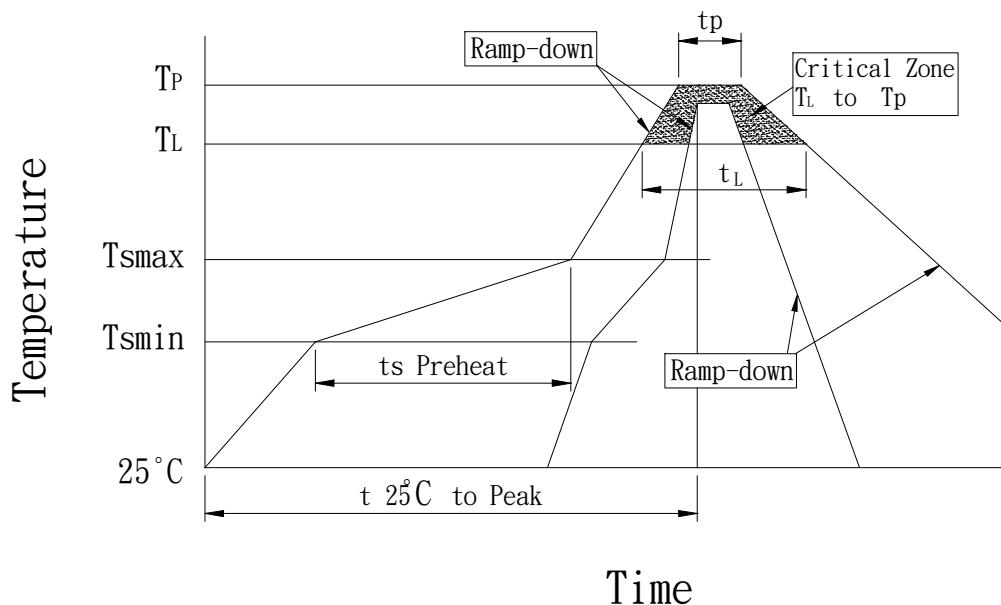
RECOMMENDED SOLDERING CONDITIONS :

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.	

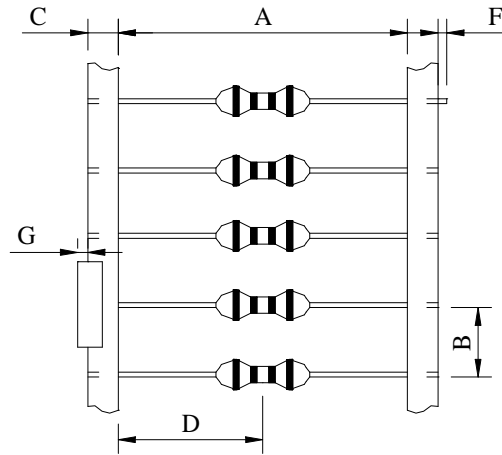
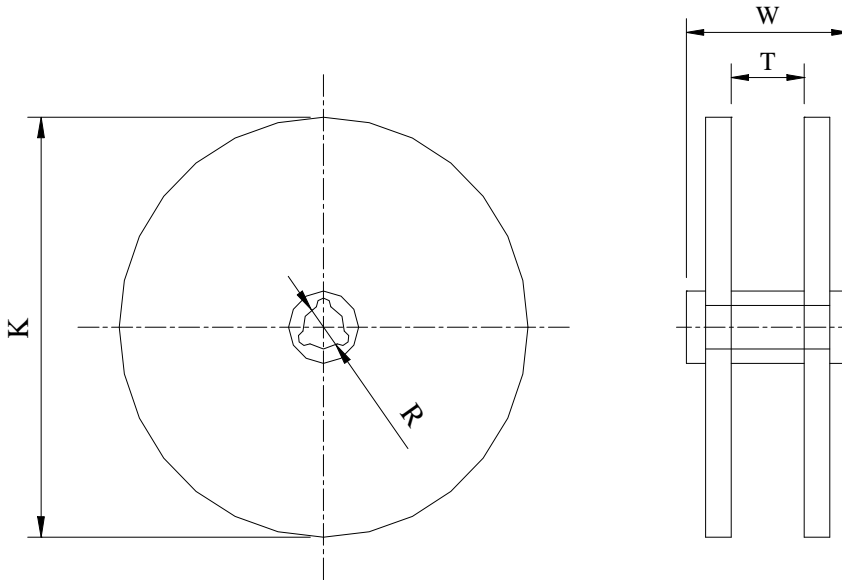
Note : All temperatures refer to top side of the package. Measured on the package body surface.

REFLOW SOLDERINGS



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PACKAGE :

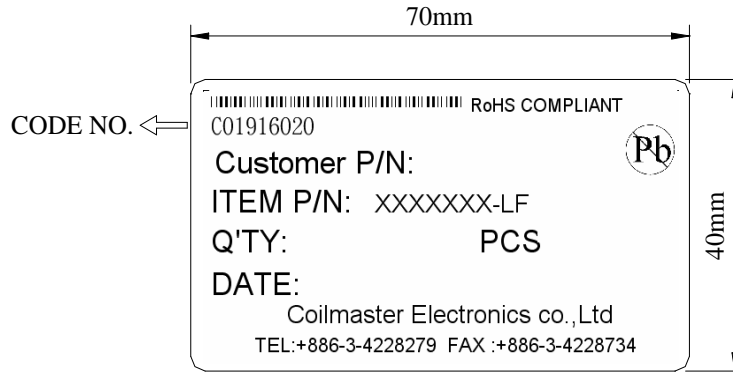


DIMENSIONS (m/m)														
Q'TY (PCS)	K	R	W	T	A	B	C	D	F	G				
5000	355 ±0.5	15.0 ±0.5	76 ±0.5	71 ±0.5	52.0 ±1.5	5.0 ±0.5	6.0 ±1.0	26.0 ±0.5	1.0 Max.	1.0 Max.				

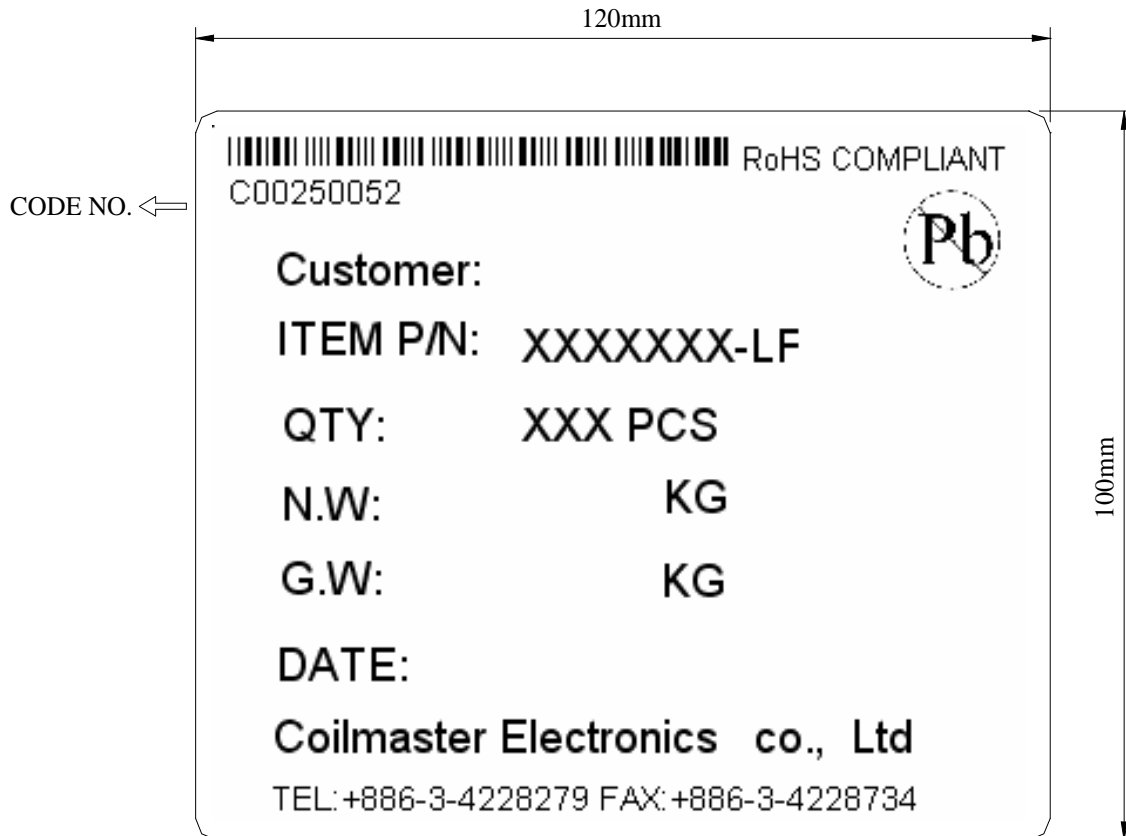
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TABLE :



INNER BOX LABEL



OUT BOX LABEL

COILMASTER ELECTRONICS CO., LTD.