



Coilmaster



RoHS Compliant

SPECIFICATION APPROVAL

CUSTOMER : Dachs

PRODUCT : SER2814-330K-LF

Pb-free

CODE NO. : C08728015

CUS. CODE :

SPEC.NO. : C-8728-015(00)

DATE : 13-Feb-20

| CUSTOMER APPROVAL |
|-------------------|
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Coilmaster Electronics Co., Ltd.

3F,NO.211 HUAN BEI ROAD, CHUNG-LI CITY

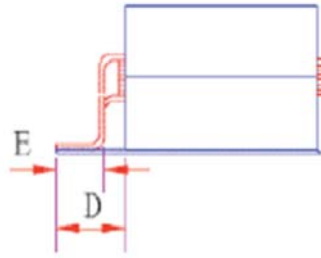
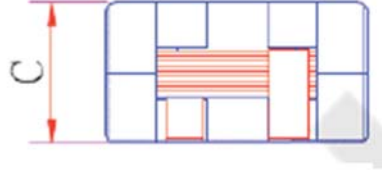
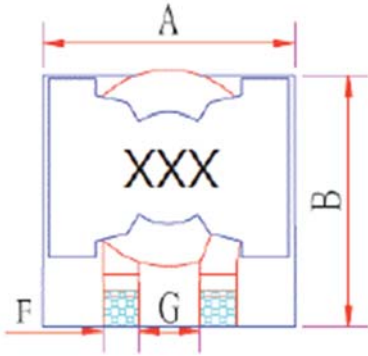
TAOYUAN HSIEN, TAIWAN, R.O.C.

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| PREPARED BY | APPROVED BY | AUTHORIZED BY |
|-------------|-------------|---------------|
| JEAN | TONY | MASCOT |

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|----------|-----------------|-------------------------------|----------|-----------|
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EXTERNAL DIMENSIONS :



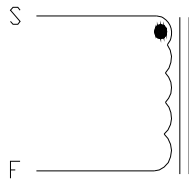
- A : 27.9 Max. m/m
- B : 26.9 Max. m/m
- C : 15.9 Max. m/m
- D : 6.5 REF m/m
- E : 3.8 REF m/m
- F : 4.0 REF m/m
- G : 6.1 REF m/m

ELECTRICAL CHARACTERISTIC :

L(μ H) : 33 \pm 10% 500KHz 0.1V
DCR(m Ω) : 1.65 Max.
Isat(A) : 2 Max. (L2A \geq 0Ax90%)

INDUCTANCE DROP : 10% Typ. @ IDC 2 A

SCHEMATIC DRAWING :



"●" START FOR STAND

MATERIAL LIST :

| NO | ITEM | MATERIAL | SUPPLIER OF THE MATERIAL |
|----|------|----------|--------------------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |

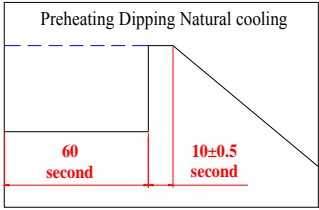
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TEST DATA

| ELECTRICAL CHARACTERISTICS | | | | | | | |
|----------------------------|-------------|---------|----------|--|--|--|--|
| MEAS. ITEM | L(μH) | DCR(mΩ) | Isat(A) | | | | |
| TEST FREQ. | 500KHz 0.1V | Max. | Max. | | | | |
| YOUR | | | L(2A) | | | | |
| SPEC. | 33±10% | 1.65 | ≥ 2Ax90% | | | | |
| 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 | F | |
| TEST FREQ. | m/m | m/m | m/m | m/m | m/m | m/m | |
| YOUR | | | | | | | |
| SPEC. | 27.9 Max. | 26.9 Max. | 15.9 Max. | 6.5 REF | 3.8 REF | 4.0 REF | |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| X | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | |
| R | 0.00 | 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 20% 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 | | |
| | | SOLDER TEMPERATURE: 255 ± 5 °C | | |
| | | FLUX: ROXIN.. DIP TIME:10 ± 0.5 SECS. | | |
| VIBRATION TEST (LOW FREQUENCY) | |  <p>1.AMPLITUDE: 1.5 mm 2.FREQUENCY: 10-55-10HZ / 1 MIN 3.DIRECTION: X, Y, Z 4.DURATION: 2 HRS/X, Y, Z</p> | | |
| 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 |
|------------|----------------|--------------------------------|
|------------|----------------|--------------------------------|

CLIMATIC TEST

| | | | |
|----------------------------|--|--|--|
| TEMPERATURE CHARACTERISTIC | 1.APEARANCE: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 | |
| 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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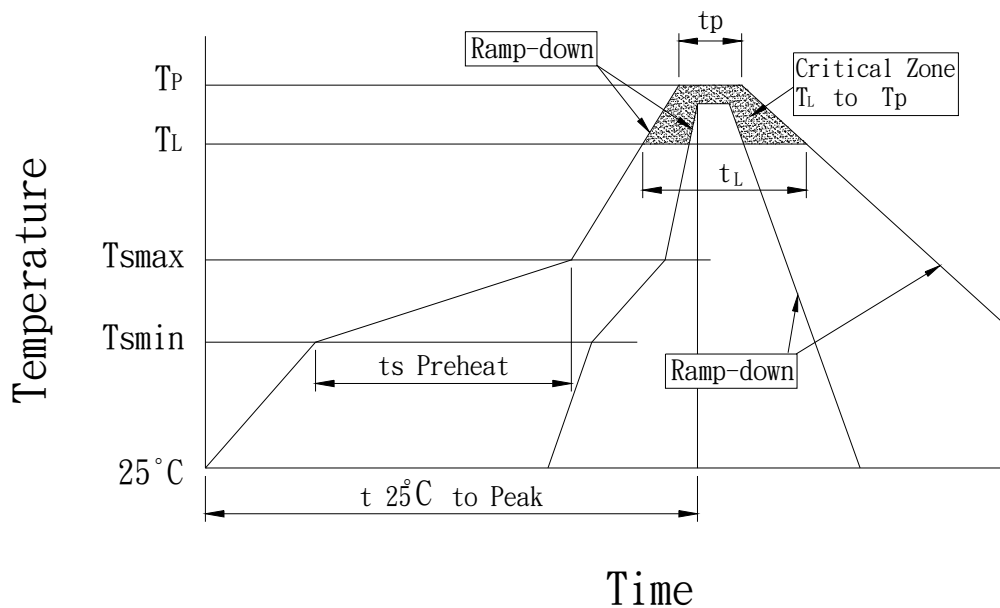
RECOMMENDED SOLDERING CONDITIONS :

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. | |

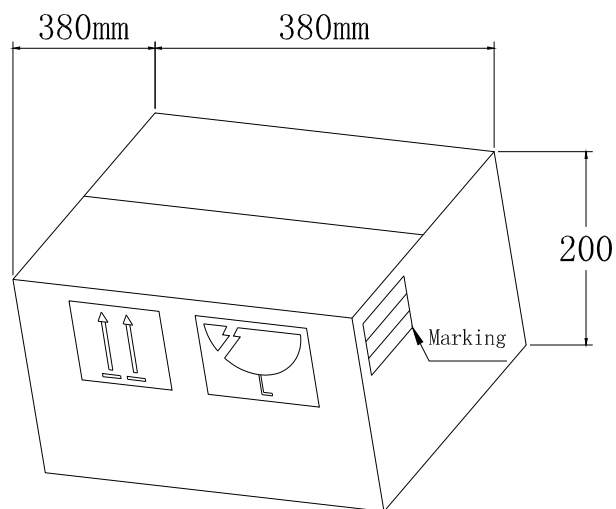
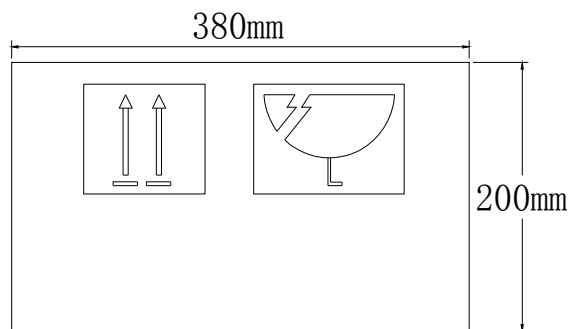
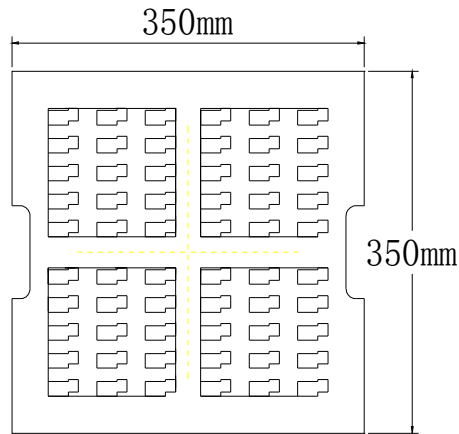
Note : All temperatures refer to topside of the package. Measured on the package body surface.

REFLOW SOLDERINGS



| | | | | |
|-----------------|-----------------|-------------------------------|-----------------|-----------|
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PACKAGE :

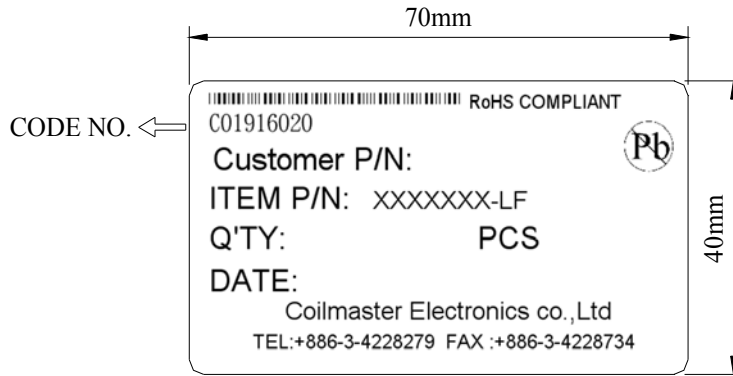


150pcs/Tray
3000pcs/carton

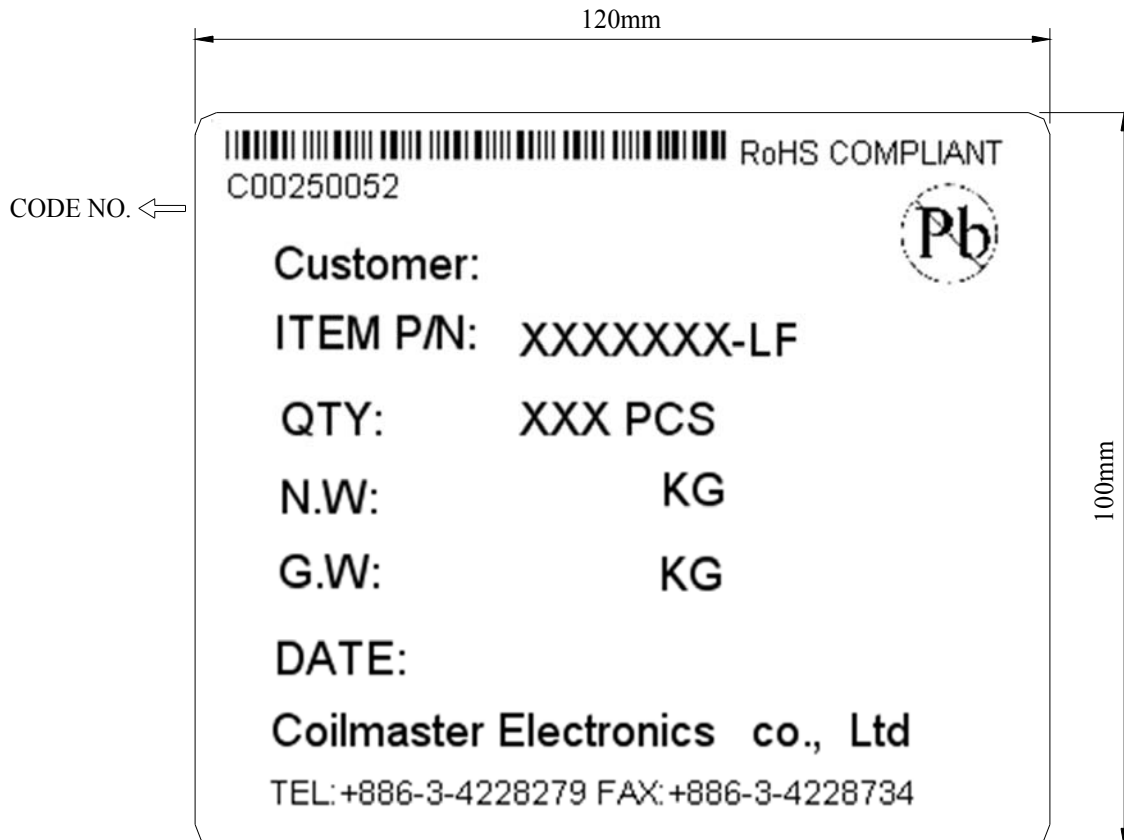
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TABLE :



INNER BOX LABEL



OUT BOX LABEL

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