

## SPECIFICATION FOR APPROVAL

**CUSTOMER'S APPROVAL CHOP**

Approval's condition: \_\_\_\_\_

Approved date: \_\_\_\_\_

KINDLY RETURN A SET WITH YOUR COMPANY'S OFFICIAL  
STAMP ON APPROVAL OF THIS ITEM

**CUSTOMER'S NAME:** \_\_\_\_\_

**CUSTOMER'S MODEL NO. :** \_\_\_\_\_

**CUSTOMER'S PART NO. :** \_\_\_\_\_

**DESCRIPTION:**

**SMD Coupled Inductor**

**Semitel'S MODEL NO. :**

**SCDRI-127PF Series**

**VERSION:**

**A**

**DATE:**

**2024/9/13**

**Attachments:**

- Product specification
- Sample Qty. :
- Test Data

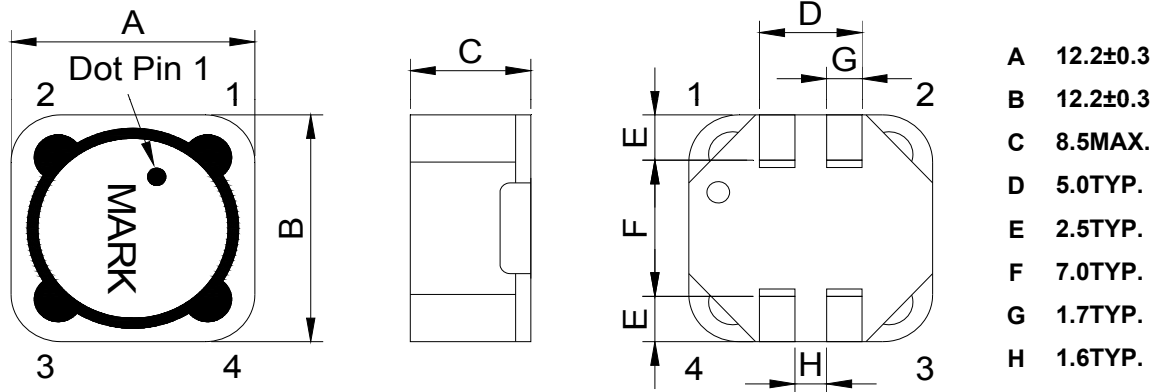
Prepared By	Checked By	Approved By
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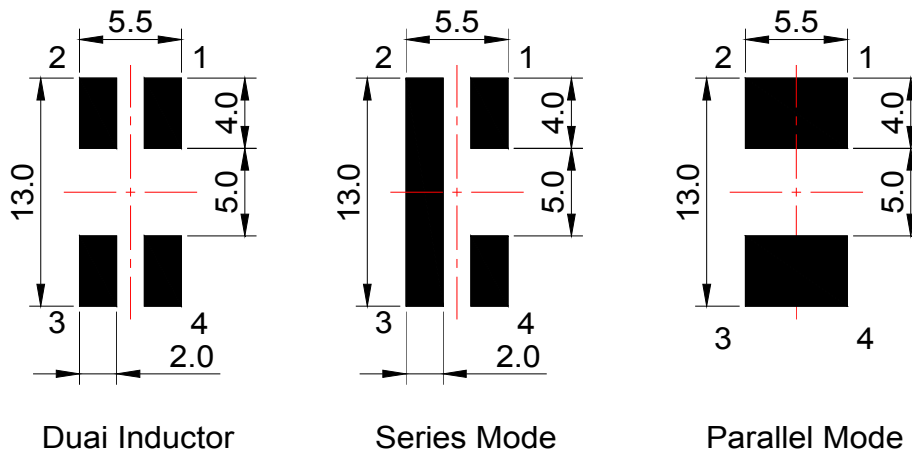


# Product Specification

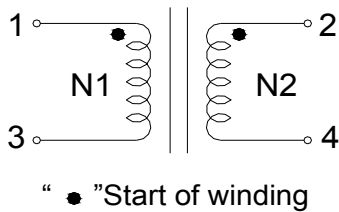
## 1. Physical Dimensions (Unit:mm)



## 2. Recommended Pad Layout (Unit:mm)



## 3. Connection



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### 4. Electrical Characteristics

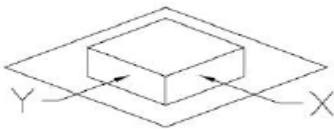
- (1). I DC1: Base on temp.rise &  $\Delta L/L0A$  30% Typ
- (2). I DC2: Temp.rise 40°C Typ
- (3). Operating temperature: -40°C to +125°C
- (4). Storage temperature: 15°C up to 25°C, 65% RH max

Part Number	Inductance 1-3=2-4 (uH) @100kHz,0.1V	DCR 1-3=2-4 ( mΩ) TYP.	I DC(1) 1-3=2-4 (A) MAX.	I DC(2) 1-3=2-4 (A) MAX.	Marking
SCDRI-127PF-1R5M-05A	1.5±30%	16	15.5	8.1	1R5
SCDRI-127PF-2R5M-05A	2.5±30%	18	14.0	7.3	2R5
SCDRI-127PF-3R3M-05A	3.3±20%	21	11.0	6.5	3R3
SCDRI-127PF-4R7M-05A	4.7±20%	30	9.0	3.2	4R7
SCDRI-127PF-6R8M-05A	6.8±20%	35	7.0	2.8	6R8
SCDRI-127PF-100M-05A	10±20%	44	6.0	2.4	100
SCDRI-127PF-220M-05A	22±20%	80	4.7	2.1	220
SCDRI-127PF-330M-05A	33±20%	130	3.5	1.5	330
SCDRI-127PF-470M-05A	47±20%	150	2.8	1.2	470
SCDRI-127PF-680M-05A	68±20%	215	2.3	1.0	680
SCDRI-127PF-101M-05A	100±20%	300	1.7	0.9	101
SCDRI-127PF-151M-05A	150±20%	400	1.3	0.8	151
SCDRI-127PF-221M-05A	220±20%	650	1.0	0.7	221
SCDRI-127PF-471M-05A	470±20%	1200	0.8	0.6	471

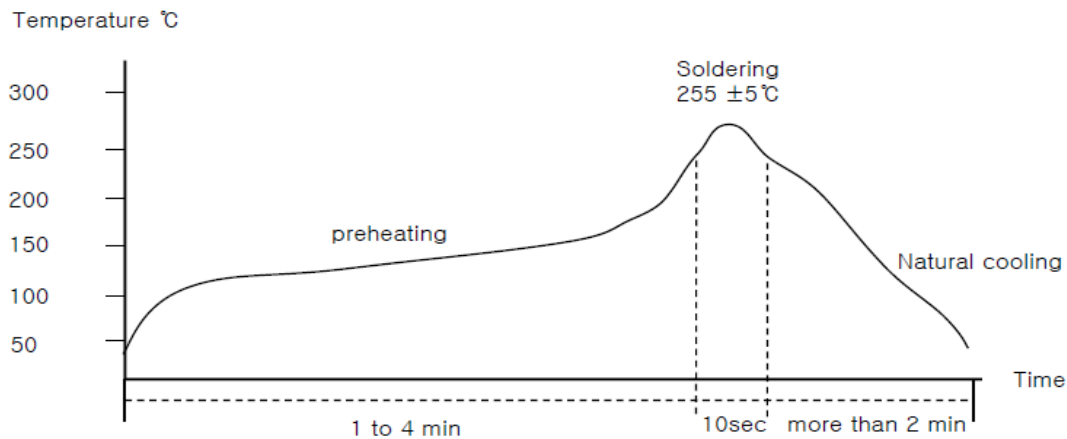
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### 5. Reliability Testing

Operating Temperature	-40 to +125 °C ( Contain Heating coil )
Appearance Inspection	No external defects by visual inspection
Terminal Strength 	After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for 10+/-2 sec. Terminal should not peel off. ( Refer to figure at right )
Heat endurance of reflow soldering	Refer to figure
Insulating resistance	Over 10MΩ at 50V D.C . between wire and core
Dielectric Strength	Apply at 0.5KV 1mA for 2S between wire and core
Temperature characteristics	Inductance coefficient ( 0~2,000 ) × 10 / °C ( - 40~ + 125 °C )
Humidity characteristics	Inductance deviation within ± 10% , after 96 hours in 90~95% relative humidity at 40 ± 2 °C and 1 hours drying under normal condition
A test is made under the above mentioned condition , and it is kept for 2 hours in the normal	

### 6. IR Reflow profile



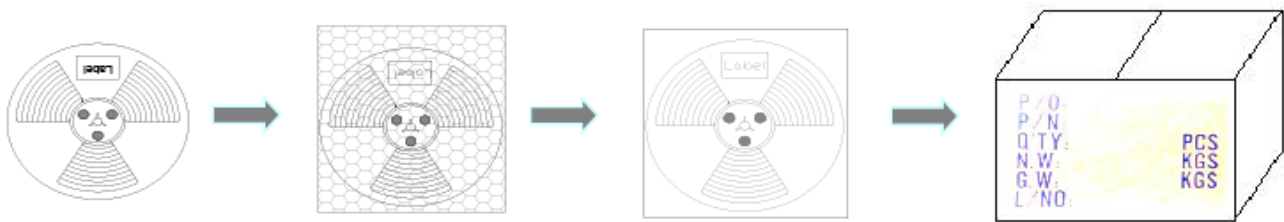
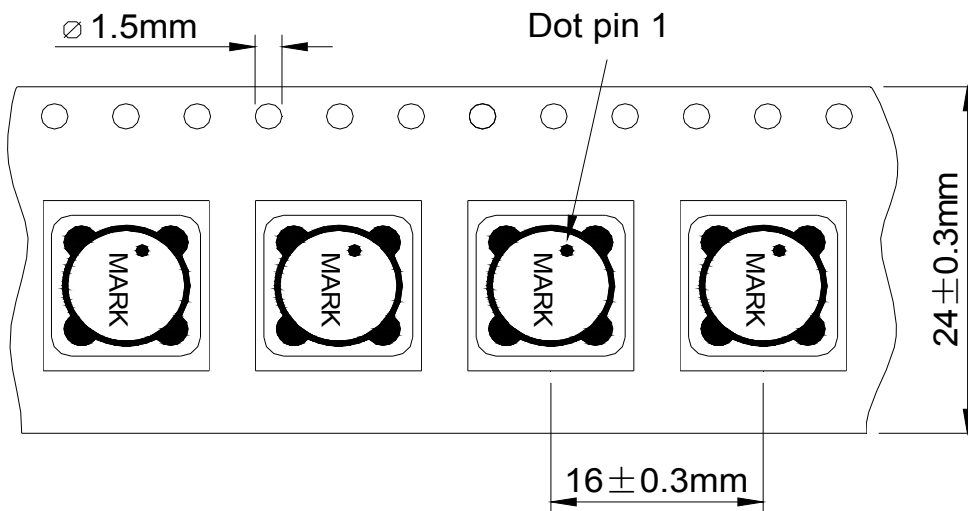
Temperature and humidity . After that , no mechanical and electrical defect should be found .

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### 7.Packing Request

- (1). Every roll of the carrier tape can contain 500pcs products.
- (2). Every small packing box contains 2 rolls of carrier tape. Total quantity: 1000pcs.
- (3). Every carton box contains 3 small packing boxes. Total quantity: 3000pcs.



Plastic reel: 13' (diameter 330mm)

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