

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:

Molding SMD Power Inductors

Semitel'S MODEL NO. :

SMTUM0930-45NM-BA

VERSION:

A

DATE:

2026/3/17

Attachments:

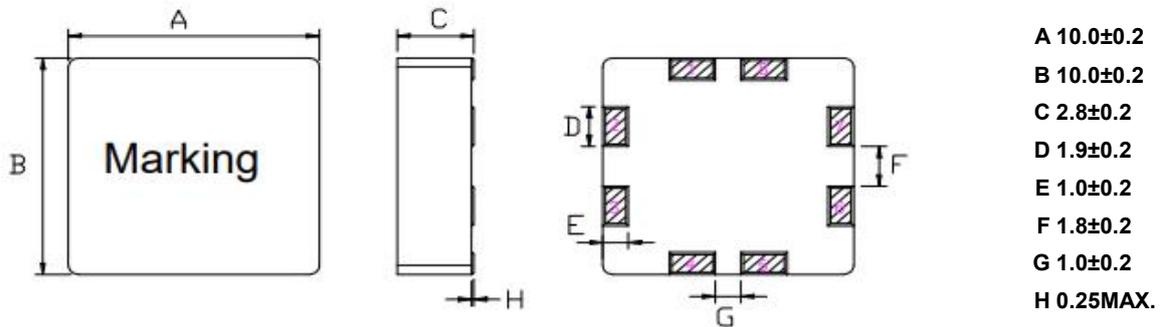
- Product specification
- Sample Qty.:
- Test data

Prepared By	Checked By	Approved By
Hebe Deng 2026/3/17	Ben Lin 2026/3/17	Eric Chang 2026/3/17

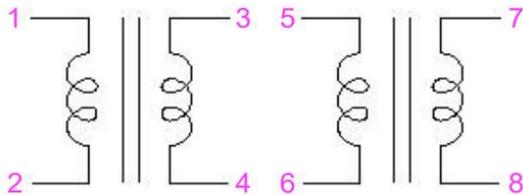
Semitel International Ltd.,	TEL: 886-2-86922121 FAX: 886-2-26483379
www.semitelint.com	11F., No. 43-5, Zhongxing Rd., Xizhi Dist., New Taipei City 221012, Taiwan

Product Specification

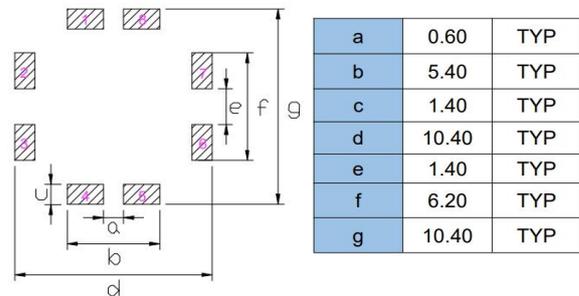
1. Physical Dimensions (Unit:mm)



2. Schematic



3. Recommend Land Pattern Dimensions



4. Electrical Characteristics

OCL	Inductance	DC Resistance	Saturation Current	Heating Rating Current
	L0(nH)±20%	DCR (mΩ)	Isat (A)	Irms (A)
	1MHz,1V	MAX(TYP)	MAX(TYP)	MAX(TYP)
1-2	45	0.35(0.25)	60.0(65.0)	37.0(42.0)
3-4	45	0.35(0.25)	60.0(65.0)	37.0(42.0)
5-6	45	0.35(0.25)	60.0(65.0)	37.0(42.0)
7-8	45	0.35(0.25)	60.0(65.0)	37.0(42.0)

Note:

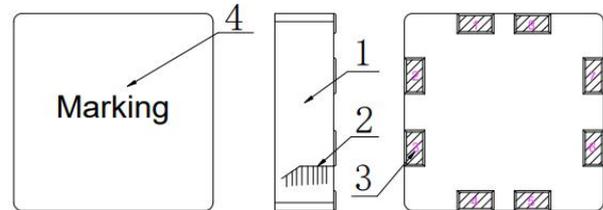
- (1). All test data is referenced to 25°C ambient.
- (2). Test the original current conditions: 1MHz, 1Vrms, Add bias current test condition: 100KHz, 1.0Vrms.
- (3). Operating temperature range - 55°C to + 155°C.
- (4). Isat (A):DC current at which the inductance drops approximate 30% TYP from its value without current
- (5). Irms: DC current that causes the temperature rise ($\Delta T = 40^\circ C$) from 25°C ambient.
- (6). The part temperature (ambient + temp rise) should not exceed 155 °C under worst case operating conditions.
- (7). Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- (8). Absolute maximum voltage 30VDC.

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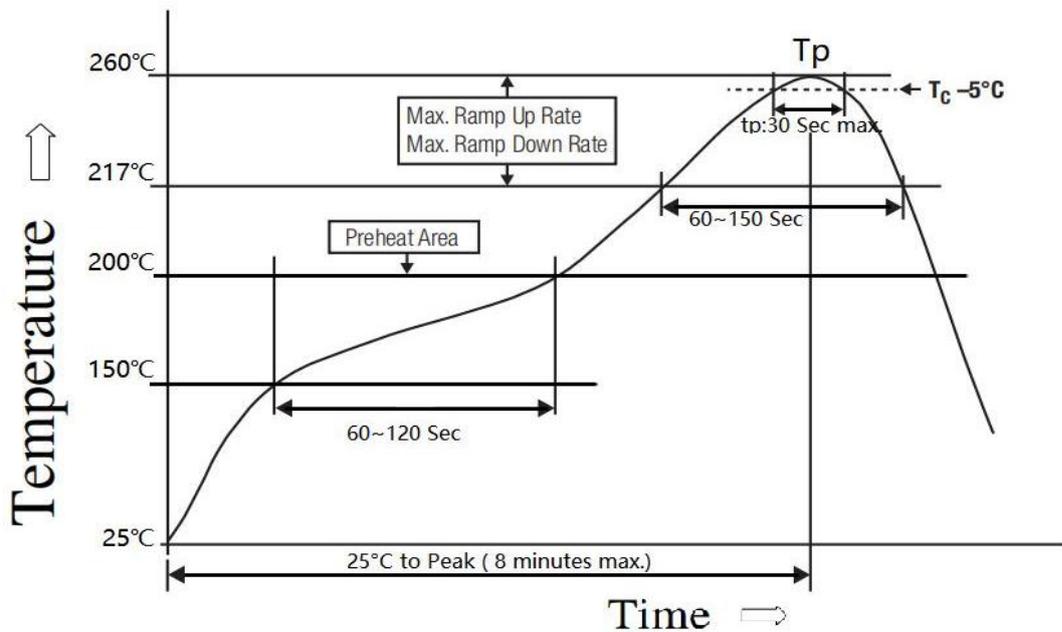
Product Specification

5. Material list

No	Item	Material
1	Core	Composite powder
2	Wire	Copper sheet
3	Base	Tinned copper
4	Ink	White



6. Recommended reflow soldering curve

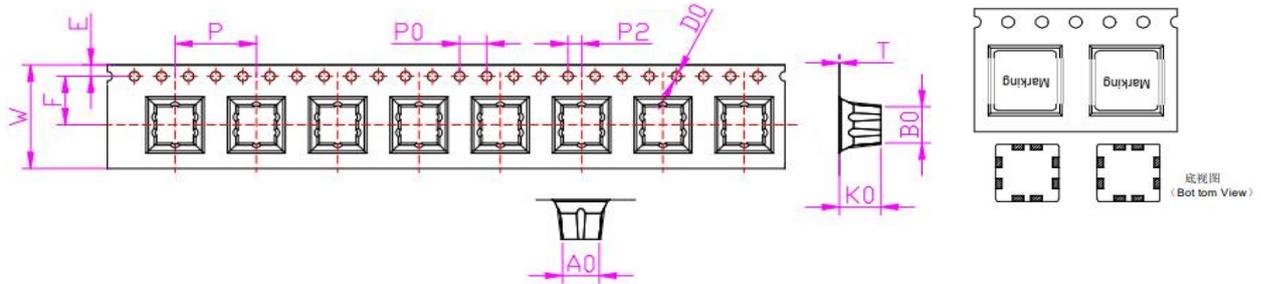


Reflow Soldering	Tp:255~260°C Max.30 seconds (tp)	
	217°C	60~150 seconds
Pre-Heat	150 ~ 200°C	60~120 seconds

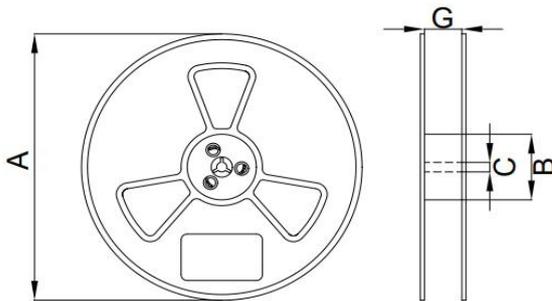
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7.Packing Request



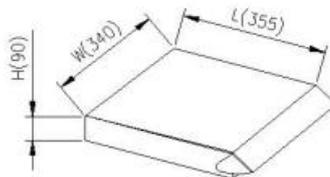
ITEM	W	A0	B0	K0	P	E	F	D0	P0	P2	T
DIM	24.00 ±0.2	10.20 ±0.2	10.20 ±0.2	3.20 ±0.1	16.00 ±0.1	1.75 ±0.1	11.50 ±0.1	1.50 ±0.1	4.00 ±0.10	2.00 ±0.1	0.40 TYP



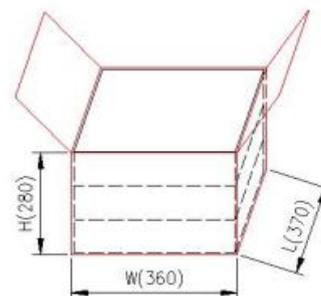
REEL SPEC	13"
A±1.0	330.0
B±1.0	100.0
C±0.50	13.2
G±0.20	24.5



13" 1000pcs



Small carton: 3000pcs



Outer carton: 9000pcs

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