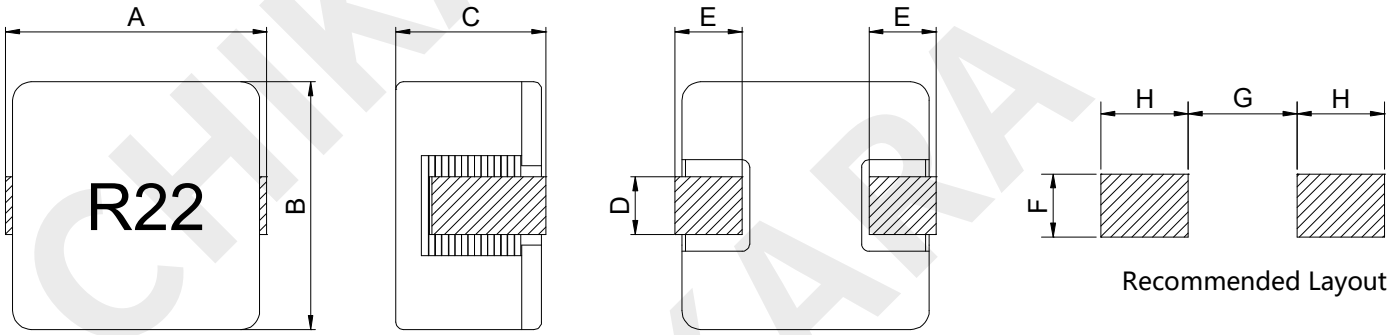
Shielded Power Inductors

SP17-070040 Type

Features

- Magnetically shielded construction, Flat wire
- Storage temperature range:-55℃ to + 125℃
- Operating temperature range:-55℃ to + 125℃ (including coil's self-temperature rise)
- Moisture sensitivity level:1
- Packaging:1000pcs. Per 13-inch reel
- RoHs&Halogen-free compliant

Mechanical Dimension(Unit:mm)



Recommended Layout

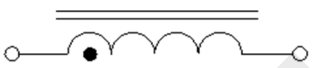
A	B	C	D	E	F	G	H
7.0±0.3	6.9±0.3	3.8±0.3	1.2±0.3	1.8±0.3	2.2	2.4	2.7

Part Number Description

SP17 - 070040 R22 M
① ② ③ ④

①	Type
②	Dimensions
③	Inductance value
④	Tolerance code

Electrical Schematic



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Electrical Characteristic

Part Number	Inductance L0(uH)	DCR (mΩ)	SRF (MHz)Typ.	Isat (A)Typ.	Irms (A)Typ.
SP17-070040R22M	0.22±20%	1.1±10%	290	32.0	21.0
SP17-070040R40M	0.40±20%	1.9±10%	250	25.0	19.0
SP17-070040R68M	0.68±20%	3.1±10%	105	20.0	17.0
SP17-0700401R0M	1.0±20%	4.6±10%	85	19.0	15.0
SP17-0700401R5M	1.5±20%	6.6±10%	72	14.0	11.0
SP17-0700402R2M	2.2±20%	11.4±10%	52	13.0	9.0
SP17-0700403R3M	3.3±20%	17.2±10%	43	11.0	6.5
SP17-0700404R7M	4.7±20%	19.5±10%	33	7.0	6.0

- Test frequency and voltage:100KHz,0.1Vrms.
- All test data referenced to 25℃ ambient.
- Saturation current(Isat) will cause L0 to drop approximately 30%.
- Heat rated current(Irms) will cause the coil temperature rise approximately Δt of 40℃.
- Heat rated current (Irms) is tested on a typical PCB and apply a constant current in still air. The temperature rise is dependent on the application system condition including PCB PAD pattern, trace width and thickness and adjacent components etc. It' s suggested to verify the temperature rise of the component under the real operation application conditions.

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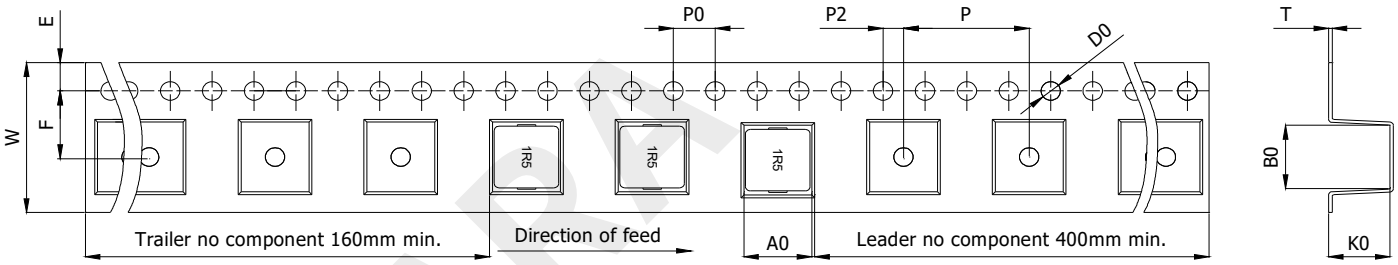
Packaging Specification

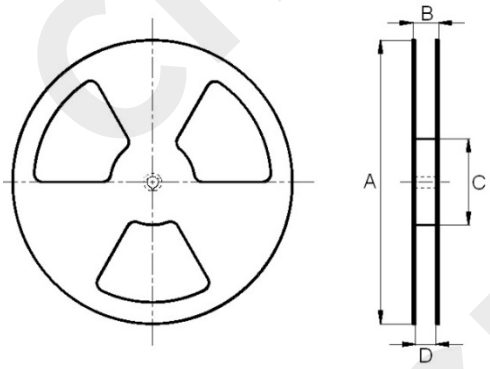
■ Carrier Tape (Unit:mm)



W	P	A0	B0	K0	E	F	P0	P2	D0	T
16.0±0.3	12.0±0.1	7.3±0.1	7.5±0.1	4.4±0.1	1.75±0.1	7.5±0.1	4.0±0.1	2.0±0.1	Φ1.5±0.1	0.4±0.05

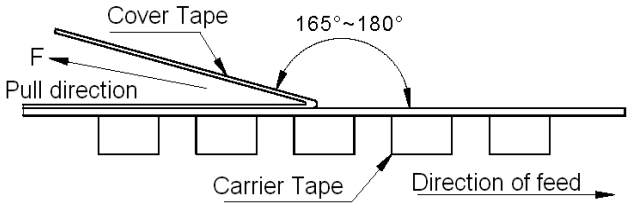
■ Reel (Unit:mm)

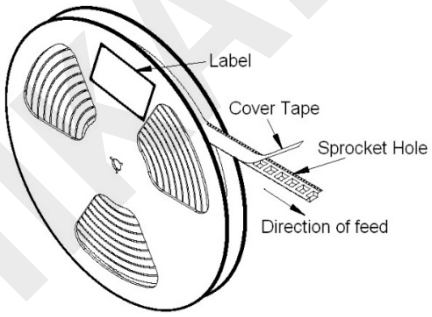
A	B	C	D
Φ330±1.0	22.1Max.	Φ100±1.0	16.5±0.5



■ Taping Method

Peel-off strength	Peel-off angle	Peel-off speed
F=0.1N~1.3N	165°~180°	300mm/min.





※ Packing is referred to the international standard IEC 60286-3.

■ Package Quantity

Parts per reel
1000Pcs

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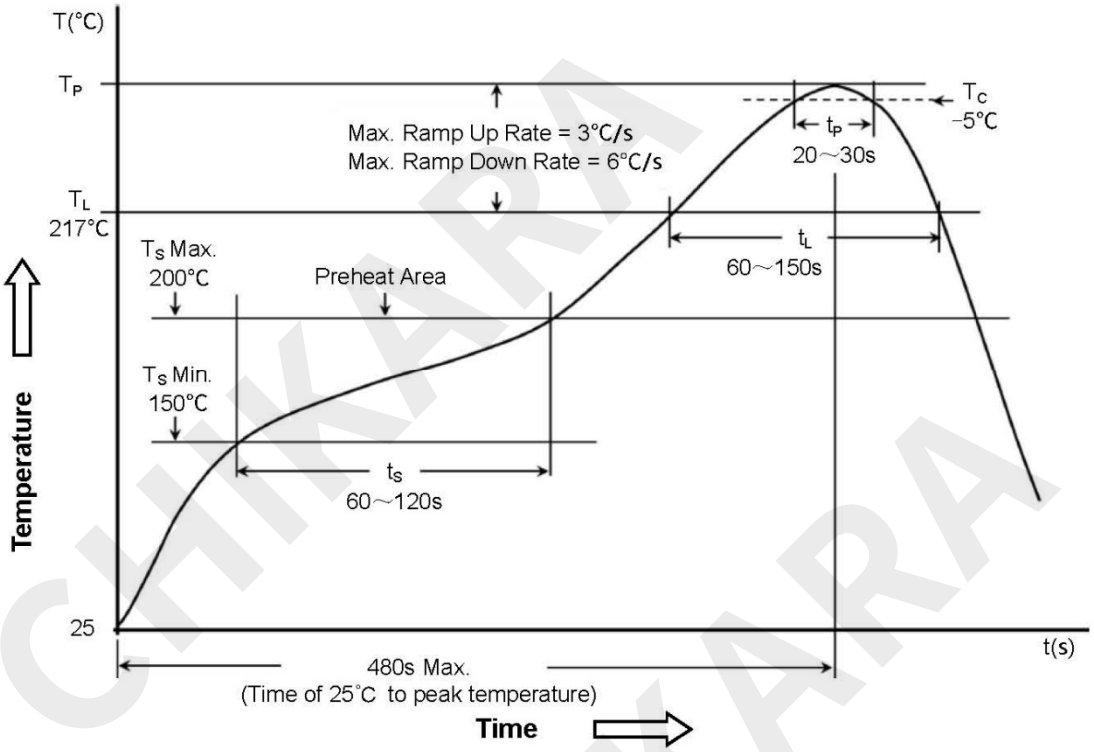
Soldering Specification

■ Reflow profile for SMT components



■ Classification of peakpackage bodytemperature (T_P)

	Package Thickness	Package Volume		
		<350mm³	350~2000mm³	>2000mm³
PB-Free Assembly	<1.6mm	260℃	260℃	260℃
	1.6~2.5mm	260℃	250℃	245℃
	≥2.5mm	250℃	245℃	245℃

※ Reflow is referred to standard IPC/JEDEC J-STD-020D.

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