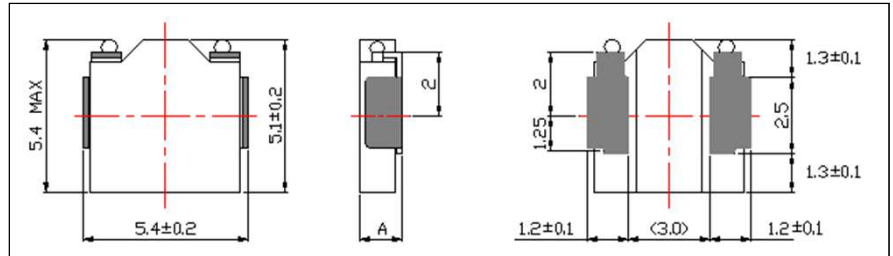
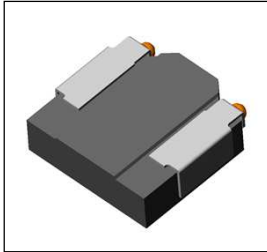


**LY**

SMD Metal Alloy Power Inductors 電源回路用薄型金屬合金功率電感

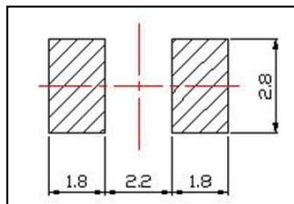
Inductance Range : 0.47 ~ 4.7 μH (SMF 0512-A-Series)
使用電感範圍 0.47 ~ 4.7 μH (SMF 0515-A-Series)
0.47 ~ 4.7 μH (SMF 0520-A-Series)

Dimensions 外型與尺寸



A = 0512 : 1.2 mm Max. / 0515 : 1.5 mm Max. / 0520 : 2.0 mm Max.

Recommended Patterns 推薦焊盤尺寸



Features : 特點

- Small and thickness 5.4 X 5.4 mm Square and 1.2 / 1.5 / 2.0 mm Max.height .
- Magnetically shielded construction, low DC resistance .
- Using high saturating flux density magnetic iron powder ensure capability for large current .
- High Curie's Temp. for wider function Temp. .
- Low audible core noise .
- Ideal for DC-DC converter applications .
- RoHS compliant. Halogen Free .
- 小型薄形 : 5.4 X 5.4 mm 的平面, 最大高度 1.2 / 1.5 / 2.0 mm
- 磁性屏蔽結構, 低直流電阻。
- 使用高飽和磁束密度合金系磁性粉, 可保證大電流。
- 居里溫度高, 動作溫度範圍廣。
- 低芯片噪音。
- DC-DC 轉換器電感器的理想選擇。
- 符合 RoHS 指令, 無鹵素。

Using : 用途

Smartphones (智慧手機), Note Book (個人平板電腦), Others (其他)

Part Numbers : 品名稱呼

SMF 0512 T - 1R0 - M - A

(1) (2) (3) (4) (5) (6)

(1) Part Numbers (系列名) : SMF-扁線

(2) Dimensions (尺寸 L*H) : 0512 - 5.4 * 1.2 mm Max.

(3) Packing (包裝方式) : T - Carrier Tape (承載膠帶)

(4) Inductance Value (電感值) : 1R0 - 1.0 μH

(5) Inductance Tolerance (電感值公差) : M = $\pm 20\%$

(6) A : LY Numbers (龍翌編號)



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電源回路用薄型金屬合金功率電感

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LY Standard Part Numbers : 龍翌標準品名

TYPE SMF 0512-A (Quantity / Reel : 4000 PCS)

龍翌品名號碼	電感值 ①	公差	最大直流電阻 ②		最大電感減小電流 ③		最大溫度上昇電流 ④	
LY Part Numbers	Inductance ① (μ H)	Tolerance (%)	DC Resistance ② (m Ω)		Inductance Decrease current ③ $\Delta L/L=30\%$		Temperature Rise Current ④ $\Delta T=40^{\circ}\text{C}$	
			Typical	Maximum	Typical	Maximum	Typical	Maximum
SMF 0512T-R47M-A	0.47	$\pm 20\%$	13.0	14.9	14.0	12.6	8.3	7.2
SMF 0512T-R68M-A	0.68	$\pm 20\%$	15.2	18.0	11.0	9.7	7.6	6.8
SMF 0512T-1R0M-A	1.0	$\pm 20\%$	20.5	23.0	10.0	8.8	6.5	5.7
SMF 0512T-1R5M-A	1.5	$\pm 20\%$	24.5	29.0	7.0	6.2	6.2	5.5
SMF 0512T-2R2M-A	2.2	$\pm 20\%$	43.3	51.5	6.8	6.0	4.2	3.7
SMF 0512T-3R3M-A	3.3	$\pm 20\%$	70.0	81.5	5.6	5.0	3.2	2.8
SMF 0512T-4R7M-A	4.7	$\pm 20\%$	84.5	100.0	4.9	4.3	3.1	2.7

TYPE SMF 0515-A (Quantity / Reel : 3000 PCS)

龍翌品名號碼	電感值 ①	公差	最大直流電阻 ②		最大電感減小電流 ③		最大溫度上昇電流 ④	
LY Part Numbers	Inductance ① (μ H)	Tolerance (%)	DC Resistance ② (m Ω)		Inductance Decrease current ③ $\Delta L/L=30\%$		Temperature Rise Current ④ $\Delta T=40^{\circ}\text{C}$	
			Typical	Maximum	Typical	Maximum	Typical	Maximum
SMF 0515T-R47M-A	0.47	$\pm 20\%$	9.4	11.2	14.5	12.5	9.5	8.5
SMF 0515T-R68M-A	0.68	$\pm 20\%$	12.2	14.5	13.5	12.0	8.1	7.3
SMF 0515T-1R0M-A	1.0	$\pm 20\%$	15.0	17.5	10.6	9.6	7.5	6.7
SMF 0515T-1R5M-A	1.5	$\pm 20\%$	21.0	24.2	9.4	8.4	6.3	5.6
SMF 0515T-2R2M-A	2.2	$\pm 20\%$	32.6	38.2	8.3	7.4	5.3	4.7
SMF 0515T-3R3M-A	3.3	$\pm 20\%$	43.3	51.0	6.0	5.2	4.7	4.2
SMF 0515T-4R7M-A	4.7	$\pm 20\%$	63.2	73.5	5.0	4.5	3.7	3.3

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LY Standard Part Numbers : 龍翌標準品名

TYPE SMF 0520-A (Quantity / Reel : 2500 PCS)

龍翌品名號碼	電感值 ①	公差	最大直流電阻 ②		最大電感減小電流 ③		最大溫度上升電流 ④	
LY Part Numbers	Inductance ① (μ H)	Tolerance (%)	DC Resistance ② (m Ω)		Inductance Decrease current ③ $\Delta L/L=30\%$		Temperature Rise Current ④ $\Delta T=40^{\circ}\text{C}$	
			Typical	Maximum	Typical	Maximum	Typical	Maximum
SMF 0520T-R47M-A	0.47	$\pm 20\%$	5.9	7.2	20.0	18.0	12.5	11.2
SMF 0520T-R68M-A	0.68	$\pm 20\%$	7.8	9.0	18.0	16.3	10.7	9.7
SMF 0520T-1R0M-A	1.0	$\pm 20\%$	11.8	14.2	15.5	14.0	8.5	7.5
SMF 0520T-1R5M-A	1.5	$\pm 20\%$	16.8	19.7	11.5	10.0	7.2	6.5
SMF 0520T-2R2M-A	2.2	$\pm 20\%$	22.4	26.2	10.8	9.6	6.2	5.6
SMF 0520T-3R3M-A	3.3	$\pm 20\%$	34.5	40.5	7.4	6.6	4.8	4.3
SMF 0520T-4R7M-A	4.7	$\pm 20\%$	46.7	54.1	5.3	4.7	4.2	3.7

① Inductance is measured with a LCR meter E4980A

(Agilent Technologies) or equivalent. Test frequency at 100kHz.

② DC resistance is measured with 16502 Milliohm Meter.

(Chroma Technologies) (Reference ambient temperature 25°C)

③ Inductance decrease current based upon 30% inductance reduction

(Approximately transient current)

from the initial value. Inductance decrease current is measured with
3302 Automatic Component Analyzer and 1320 Bias Current Source.

(Chroma Technologies)

④ Temperature rise current based upon 40°C temperature rise.(Reference ambient temperature 25°C)⑤ Operating temperature range $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (Including self - temperature rise)

① 電感值是以LCR儀表E4980A (Agilent技術)

或者相同功能儀器在100kHz下測試。

② 直流電阻值是通過毫歐姆表16502 (Chroma技術)測得。

(測試環境溫度為 25°C)。

③ 電感值降低電流是基於電感值從最初的值降低30%計算。

(瞬間電流)

電感值降低電流是以3302自動零件分析儀和1320直流
重疊電流源測得。

(Chroma技術)

④ 溫度升高電流是基於溫度上升 40°C 的基礎上衡量的(測試環境溫度為 25°C)。⑤ 動作溫度範圍是 $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (包含溫昇)

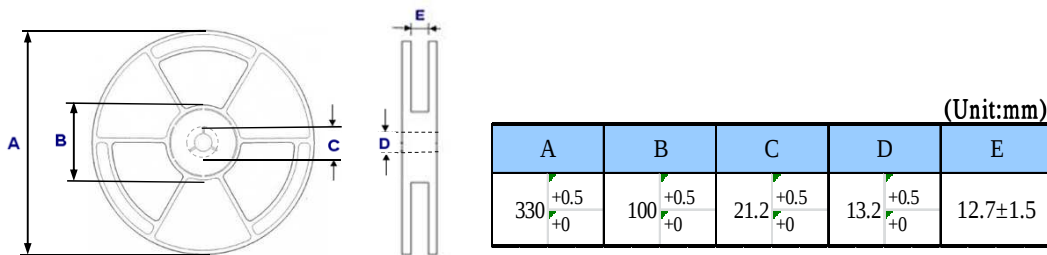
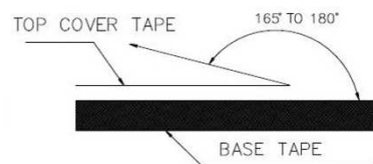
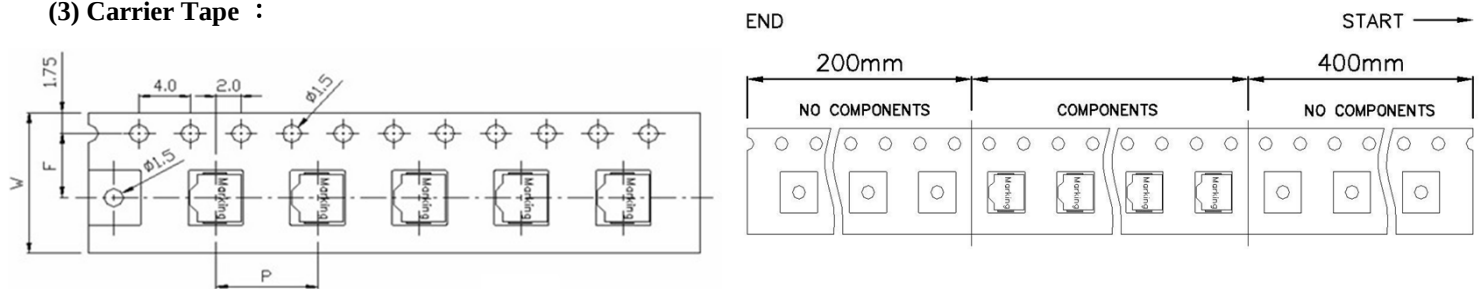
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銷售部詳細討論您的購買計劃。

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**LY****SMD Metal Alloy Power Inductors****電源回路用薄型金屬合金功率電感**

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Packaging Information :**(1) Reel :****(2) Top Cover Tape Pulling Force & Angle :**Typical Pulling Force:
10-130g**(3) Carrier Tape :**

(Unit:mm)

P	W	F
8.0±0.1	12.0±0.3	5.5±0.1

(4) Packing Quantity :

Type	Inner : BOX		Outer : CARTON
	Pcs/Reel	1 Reel / BOX BOX Size (mm)	12 BOX / CARTON CARTON Size (mm)
0512	4000	340 x 340 x 28	365 x 365 x 430
0515	3000		
0520	2500		