

FEATURES

- Magnetic shielded structure
- Low DCR and high efficiency
- Low profile and small size

APPLICATIONS

- Power supply and noise filter circuits
- Consumer devices like set top box, wireless router, LCD TV and DVD etc
- Portable electronics such as mobile phone, GPS, digital camera etc
- Tablet, notebook, desktop PC etc
- LED lighting and backlight etc

ELECTRICAL SPECIFICATIONS

PART NO.	INDUCTANCE (μH)	R _{dc} (Ω) ±20%	SATURATION CURRENT ⁵ (A)	RMS CURRENT ⁴ (A)	SRF MHZ (REF)
TYS50401R5N-10	1.5	0.015	6.30	4.30	86
TYS50402R2N-10	2.2	0.019	4.90	3.80	50
TYS50403R3N-10	3.3	0.024	3.95	3.40	32
TYS50404R7N-10	4.7	0.030	3.50	3.00	28
TYS50406R8M-10	6.8	0.043	2.90	2.50	21
TYS5040100M-10	10	0.064	2.35	2.10	18
TYS5040150M-10	15	0.086	2.00	2.00	13
TYS5040220M-10	22	0.129	1.60	1.50	11
TYS5040330M-10	33	0.188	1.30	1.20	9.1
TYS5040470M-10	47	0.272	1.10	1.00	6.7
TYS5040680M-10	68	0.400	0.90	0.80	5.7
TYS5040101M-10	100	0.560	0.75	0.70	4.7

1 Electrical specifications at 20°C.

2 Tolerance: M: ±20%, N: ±30%

3 Inductance tested at 100 KHz, 1V

4 RMS Current is defined based on temperature rise up to or less than 40°C from 20°C ambient.

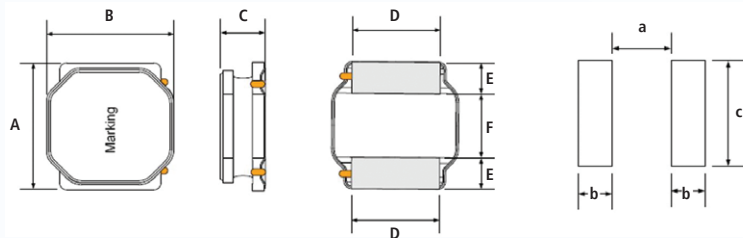
5 Saturation Current is the DC current at which the inductance drops approximate 30% from its value without current.

6 Operate temperature range: -25°C~+125°C (including self-temperature rise)

7 Storage temperature range (packaging conditions): -10°C~+40°C and RH 70%(MAX.)

SHAPES AND DIMENSIONS

Unit: mm



A	B	C Max.	D	E	F	a Typ.	b Typ.	c Typ.
5.0±0.2	5.0±0.2	4.0	4.0±0.2	1.25±0.2	2.5±0.2	2.3	1.4	4.2

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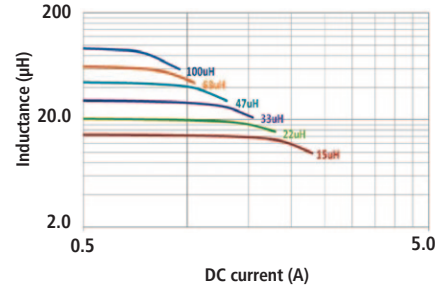
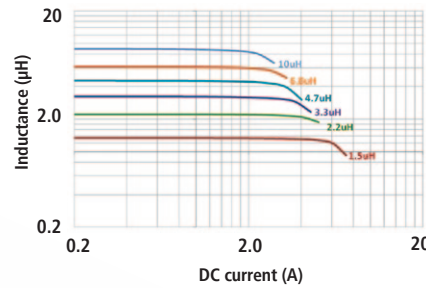
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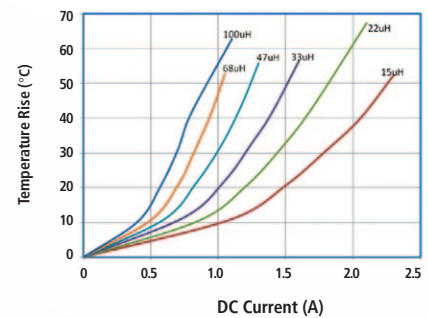
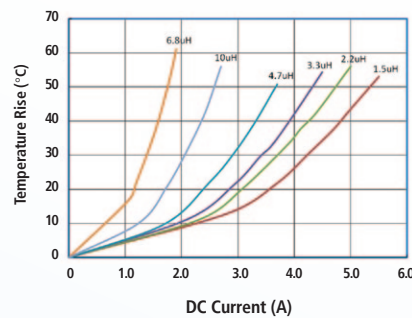
Asia: +86.755.2714.1166

TYPICAL ELECTRICAL CHARACTERISTICS

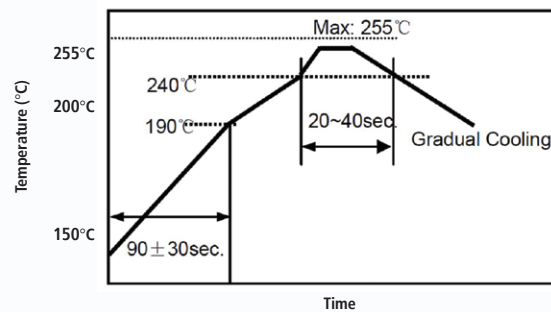
Typical L vs Current



Characters of Temperature Rise



Temperature Profile of Reflow Soldering



ORDERING INFORMATION

PART NUMBER EXAMPLE

T	Y	S	5	0	4	0	4	R	7	N	-	1	0
Product series code			Part size code			Inductance value code (i.e. 4R7: 4.7μH)			Tolerance % (i.e. M: ±20% • N: ±30%)		PB free code (i.e. 10: PB free)		

Mouser Electronics

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