



FEATURES



- Magnetic shielded structure
- Low DCR and high efficiency
- Low profile and small size
- High reliability
- AEC-Q200 qualified

APPLICATIONS

- DC-DC converters and power suppliers
- LCD TV's, Blu-ray and gaming consoles
- Tablets, notebooks, servers and printers
- Smart phones, GPS, set top box and base stations
- LED lighting
- Automotive

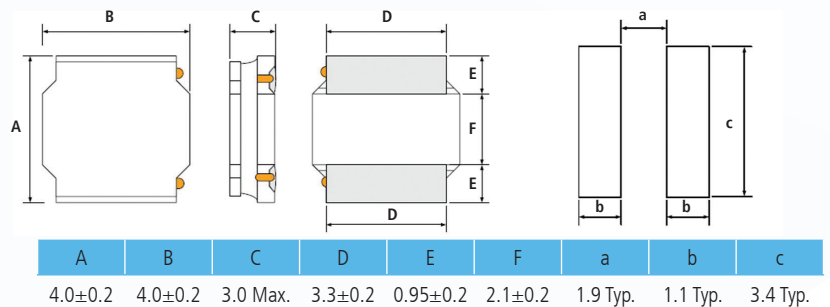
ELECTRICAL SPECIFICATIONS

PART NO.	INDUCTANCE (μH)	R _{dc} (Ω) ±30%	SATURATION CURRENT ² (A)	RMS CURRENT ⁴ (A)	SRF MHZ (REF)
TYS40301R0N-10	1	0.014	5.26	4.15	70
TYS40301R5N-10	1.5	0.020	4.84	3.34	62
TYS40302R2N-10	2.2	0.030	4.90	2.95	52
TYS40303R3M-10	3.3	0.040	3.30	2.40	38
TYS40304R7M-10	4.7	0.060	2.90	2.00	31
TYS40306R8M-10	6.8	0.090	2.75	1.60	24
TYS4030100M-10	10	0.100	1.95	1.50	21
TYS4030150M-10	15	0.190	1.65	1.11	16
TYS4030220M-10	22	0.225	1.30	1.00	10
TYS4030330M-10	33	0.330	1.10	0.84	10
TYS4030470M-10	47	0.490	0.95	0.72	8.4
TYS4030680M-10	68	0.868	0.72	0.52	7
TYS4030101M-10	100	1.150	0.60	0.45	5.6
TYS4030121M-10	120	1.350	0.55	0.42	5.4

- 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 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: -40°C ~ +125°C (including self-temperature rise)
- 7 Storage temperature range (packaging conditions): -10°C ~ +40°C and RH 70%(MAX.)

SHAPES AND DIMENSIONS

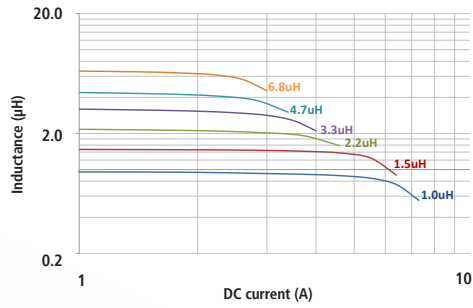
Unit: mm



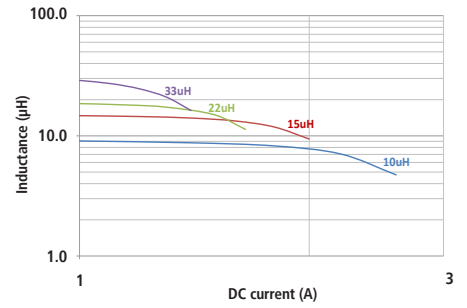
USA: +1.866.928.8181
Europe: +49.0.8031.2460.0
Asia: +86.755.2714.1166

TYPICAL ELECTRICAL CHARACTERISTICS

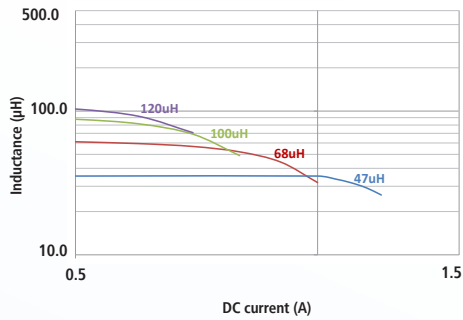
Typical L vs Current



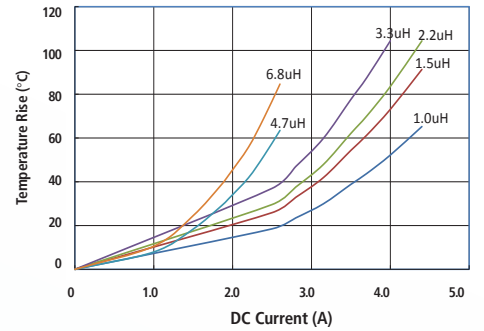
Typical L vs Current



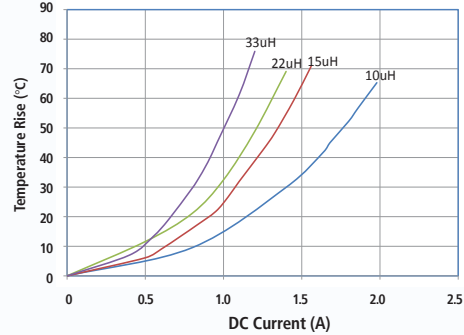
Typical L vs Current



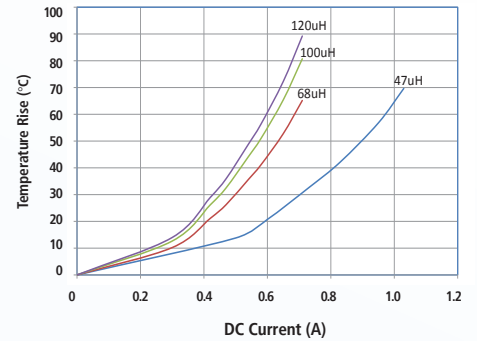
Characters of Temperature Rise



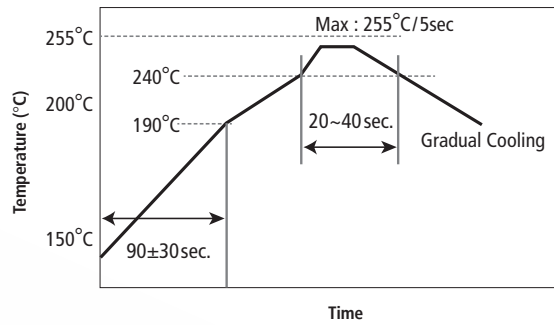
Characters of Temperature Rise



Characters of Temperature Rise



Temperature Profile of Reflow Soldering



PACKAGING INFORMATION

- Standard Tape and Reel Quantity (PCS) = 2000
- Reel Size = 13 inches

ORDERING INFORMATION

PART NUMBER EXAMPLE

T Y S	4 0 3 0	4 R 7	M	-	1 0
Product series code	Part size code	Inductance value code <small>(i.e. 4R7: 4.7µH)</small>	Tolerance % <small>(i.e. M: ±20% · N:±30%)</small>		PB free code <small>(i.e. 10: PB free)</small>

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Laird Technologies:

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[TYS40301R0N-10](#) [TYS4030680M-10](#) [TYS4030121M-10](#) [TYS4030100M-10](#) [TYS4030330M-10](#) [TYS40301R5N-10](#)
[TYS40303R3M-10](#)