



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 (μ H)	Rdc (Ω) $\pm 30\%$	SATURATION CURRENT ⁵ (A)	RMS CURRENT ⁴ (A)	SRF MHZ (REF)
TYS30151R0N-10	1.0	0.035	2.32	2.35	150
TYS30151R5N-10	1.5	0.050	2.30	1.70	100
TYS30152R2N-10	2.2	0.060	1.60	1.60	86
TYS30153R3M-10	3.3	0.088	1.32	1.36	68
TYS30154R7M-10	4.7	0.125	1.10	1.09	46
TYS30156R8M-10	6.8	0.200	0.85	0.85	39
TYS3015100M-10	10	0.250	0.72	0.77	41
TYS3015150M-10	15	0.380	0.66	0.65	30
TYS3015220M-10	22	0.460	0.52	0.57	23
TYS3015330M-10	33	0.820	0.44	0.43	20
TYS3015470M-10	47	1.250	0.35	0.35	14

1 Electrical specifications at 20°C.

2 Tolerance: M: $\pm 20\%$, N: $\pm 30\%$

3 Inductance tested at 100 KHz, 1V

4 RMS Current is defined based on temperature rise 40°C from 20°C ambient

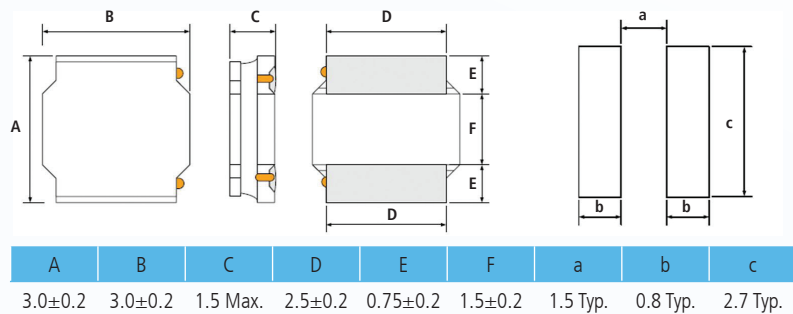
5 Saturation Current is the DC current at which the inductance drops approximate 30% from its value without current

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

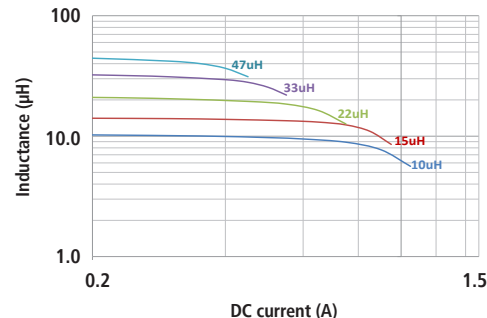
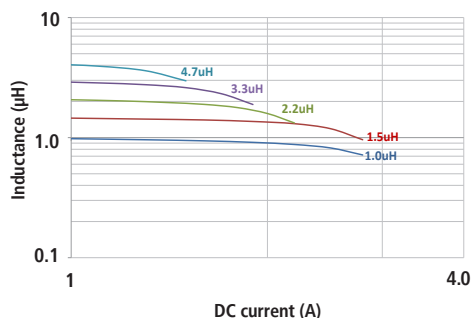
Unit: mm



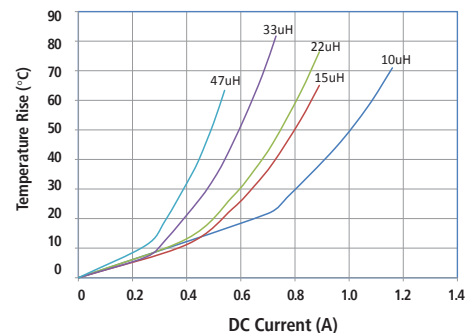
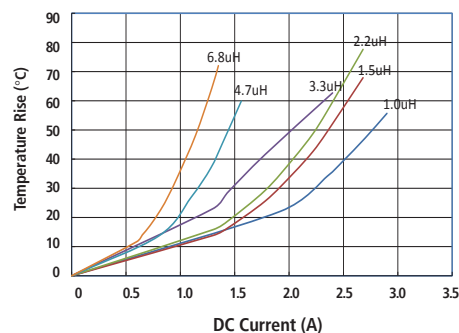
USA: +1.866.928.8181
Europe: +49.0.8031.2460.0
Asia: +86.755.2714.1166

TYPICAL ELECTRICAL CHARACTERISTICS

Typical L vs Current



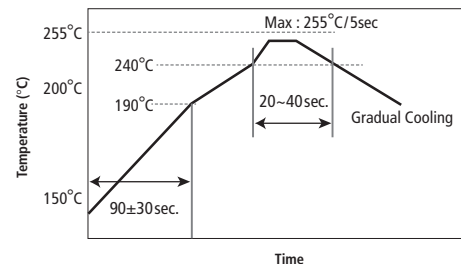
Characters of Temperature Rise



PACKAGING INFORMATION

- Standard Tape and Reel Quantity (PCS) = 2000
- Reel Size = 7 inches

Temperature Profile of Reflow Soldering



ORDERING INFORMATION

PART NUMBER EXAMPLE

T	Y	S	3	0	1	5	4	R	7	M	-	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)		

SIP-DS-TYS 3015 0413

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