



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 ⁵ (A)	RMS CURRENT ⁴ (A)	SRF MHZ (REF)
TYS80401R0N-10	1.0	0.008	9.85	6.30	89
TYS80401R4N-10	1.4	0.010	8.15	5.65	67
TYS80402R0N-10	2.0	0.012	9.25	5.15	43
TYS80402R2N-10	2.2	0.012	7.10	5.15	41
TYS80403R3N-10	3.3	0.017	6.50	4.40	27
TYS80403R6N-10	3.6	0.017	7.52	4.35	30
TYS80404R7N-10	4.7	0.019	5.90	4.10	24
TYS80406R8M-10	6.8	0.024	4.55	3.60	20
TYS8040100M-10	10	0.029	3.60	3.30	15
TYS8040150M-10	15	0.047	2.95	2.60	12
TYS8040220M-10	22	0.069	2.40	2.10	9.5
TYS8040330M-10	33	0.097	2.05	1.80	7.8
TYS8040470M-10	47	0.136	1.75	1.55	6.4
TYS8040680M-10	68	0.196	1.45	1.25	4.9
TYS8040101M-10	100	0.290	1.15	1.00	4.2
TYS8040151M-10	150	0.410	1.10	0.85	3.5
TYS8040221M-10	220	0.599	0.85	0.80	3.5
TYS8040331M-10	330	0.889	0.68	0.64	2.8

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.

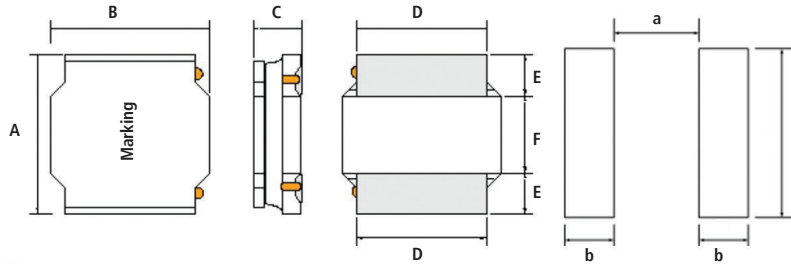
6 Operate temperature range: -40°C~+125°C (including self-temperature rise)

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

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

SHAPES AND DIMENSIONS

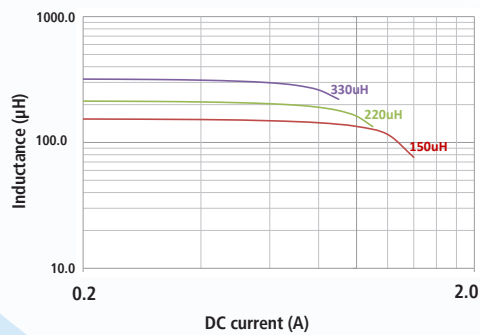
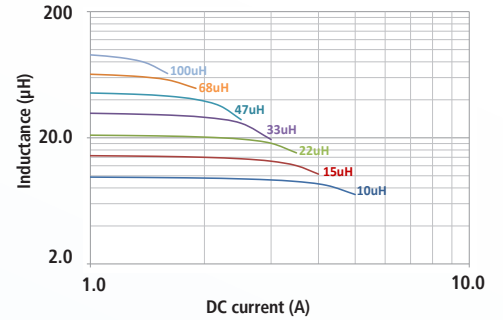
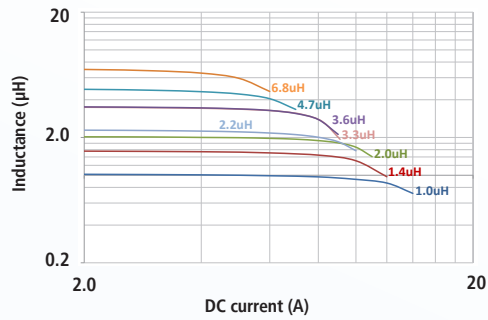
Unit: mm



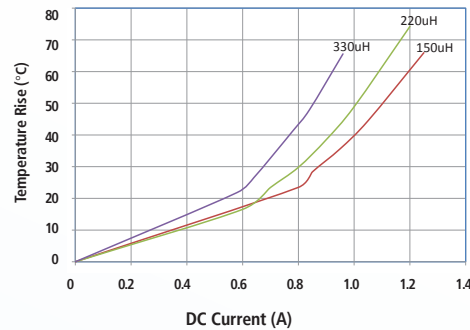
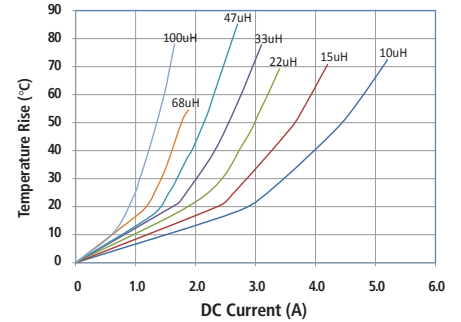
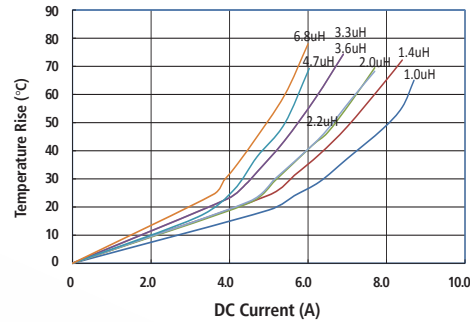
A	B	C max.	D	E	F	a Typ.	b Typ.	c Typ.
8.0±0.3	8.0±0.3	4.2 max.	6.3±0.3	2.00±0.3	4.0±0.3	3.8 Typ.	2.2 Typ.	7.5 Typ.

TYPICAL ELECTRICAL CHARACTERISTICS

Typical L vs Current



Characters of Temperature Rise



PACKAGING INFORMATION

- Standard Tape and Reel Quantity (PCS) = 1000
- Reel Size = 13 inches

ORDERING INFORMATION

PART NUMBER EXAMPLE

T	Y	S	8	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)		

Temperature Profile of Reflow Soldering

