

Type 3625 Series

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The 3625 series is used in similar applications to the 3624 series, however with a slightly different design aimed at very low resistance to keep power loss to a minimum. The 3625 series combines all the attributes of Tyco Sigma inductors to give an economically priced, high reliability product suited to power line DC-DC conversion applications and use within a wide range of electronic equipment applications.

Key Features

- Isat to 8A
- Irms to 7.2A
- Taped and Reeled
- Low RDC
- Available in 3 different sizes

PRODUCT
PLANNED FOR
EOL

LTB 18/08/2023

Electrical Characteristics - 3625A Series

Inductance Code	Inductance (µH)	Tolerance	Test Freq. (Hz)	R. D. C. (Ω) Max.	Irms (A)	Isat (A)
1R5	1.5	±20%	100K	0.028	4.00	3.50
2R2	2.2	±20%	100K	0.030	3.30	2.80
3R3	3.3	±20%	100K	0.058	2.50	2.30
4R7	4.7	±20%	100K	0.065	2.20	2.00
6R8	6.8	±20%	100K	0.085	2.00	1.70
100	10.0	±20%	100K	0.115	1.70	1.50
150	15.0	±20%	100K	0.160	1.40	1.15
220	22.0	±20%	100K	0.210	1.25	0.95
330	33.0	±20%	100K	0.320	1.00	0.80
470	47.0	±10%	100K	0.450	0.75	0.70
680	68.0	±10%	100K	0.650	0.65	0.60
101	100.0	±10%	100K	0.880	0.52	0.50
151	150.0	±10%	100K	1.280	0.40	0.38
221	220.0	±10%	100K	1.920	0.33	0.30
331	330.0	±10%	100K	2.850	0.28	0.26
471	470.0	±10%	100K	4.350	0.22	0.21
681	680.0	±10%	100K	6.500	0.18	0.18
102	1000.0	±10%	100K	12.500	0.13	0.14

Electrical Characteristics - 3625B Series

Inductance Code	L (µH)	Tolerance	Q Ref.	Test Freq. (MHz)		R. D. C. (Ω) Max.	Irms (A)	Isat (A)
				L	Q			
2R7	2.7	±20%	25	100K/0.1V	7.96	0.026	4.80	6.20
4R5	4.5	±20%	25	100K/0.1V	7.96	0.033	4.20	5.20
6R8	6.8	±20%	22	100K/0.1V	7.96	0.040	3.50	4.20
100	10.0	±20%	26	100K/0.1V	2.52	0.050	3.20	3.60
150	15.0	±20%	26	100K/0.1V	2.52	0.068	2.50	3.00
220	22.0	±20%	22	100K/0.1V	2.52	0.088	2.20	2.60
330	33.0	±20%	20	100K/0.1V	2.52	0.110	1.90	2.10
470	47.0	±20%	21	100K/0.1V	2.52	0.165	1.60	1.85
680	68.0	±20%	21	100K/0.1V	2.52	0.225	1.30	1.50
101	100.0	±10%	14	100K/0.1V	0.796	0.300	1.10	1.30
151	150.0	±10%	16	100K/0.1V	0.796	0.500	0.85	1.05
221	220.0	±10%	15	100K/0.1V	0.796	0.680	0.72	0.85
331	330.0	±10%	12	100K/0.1V	0.796	0.950	0.62	0.70
471	470.0	±10%	12	100K/0.1V	0.796	1.280	0.52	0.58
681	680.0	±10%	13	100K/0.1V	0.796	1.920	0.43	0.46
102	1000.0	±10%	25	100K/0.1V	0.252	2.700	0.38	0.40

Electrical Characteristics - 3625C Series

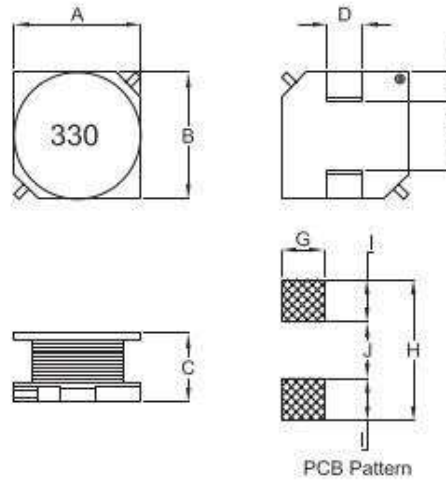
Inductance Code	L (µH)	Tolerance	Q Ref.	Test Freq.		S. R. F. (MHz) Typ.	R. D. C. (mΩ) Max.	Irms (A)	Isat (A)
				L (Hz)	Q (MHz)				
2R5	2.5	±25%	20	100K/10mV	7.96	61.0	14	7.20	8.00
3R5	3.5	±25%	18	100K/10mV	7.96	43.0	16	6.00	7.00
4R6	4.6	±25%	20	100K/10mV	7.96	35.0	18	5.20	6.00
6R8	6.8	±25%	18	100K/10mV	7.96	32.0	24	4.30	5.20
100	10.0	±20%	25	100K/10mV	2.52	27.0	37	3.60	4.40
150	15.0	±20%	25	100K/10mV	2.52	24.0	46	3.30	3.70
220	22.0	±20%	26	100K/10mV	2.52	20.0	62	2.90	3.00
330	33.0	±20%	22	100K/10mV	2.52	16.0	85	2.50	2.60
470	47.0	±20%	20	100K/10mV	2.52	13.0	130	1.90	2.00
680	68.0	±20%	20	100K/10mV	2.52	11.0	165	1.65	1.80
101	100.0	±10%	18	100K/10mV	0.796	11.0	255	1.40	1.40
151	150.0	±10%	15	100K/10mV	0.796	8.0	380	1.20	1.15
221	220.0	±10%	15	100K/10mV	0.796	7.0	500	1.00	0.95
331	330.0	±10%	10	100K/10mV	0.796	6.0	700	0.85	0.80
471	470.0	±10%	10	100K/10mV	0.796	4.0	1150	0.67	0.70
681	680.0	±10%	10	100K/10mV	0.796	3.5	1400	0.60	0.58
102	1000.0	±10%	32	100K/10mV	0.252	2.7	2350	0.46	0.47

Type 3625 Series

Environmental Characteristics -

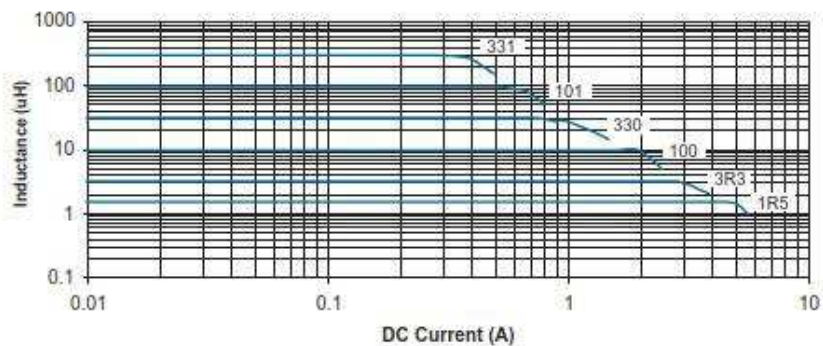
Storage Temp:	-40°C to +125°C
Operating Temp:	-40°C to +125°C (Temp. Rise included)
Rated Current:	Base on Temp. Rise & $\Delta L/L = 10\%$ Max.
Temp. Rise:	40°C Max.

Dimensions



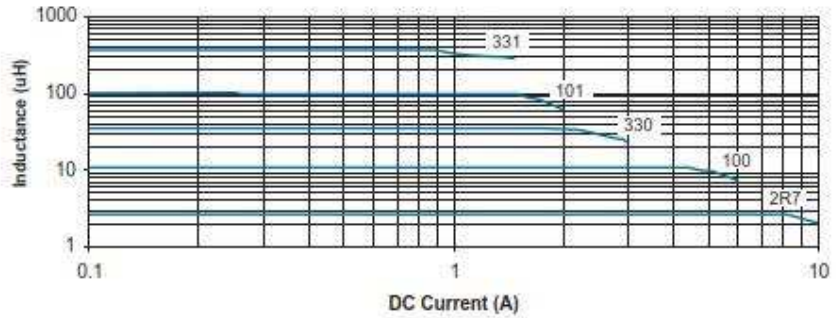
Series	A	B	C	D	E	F	G	H	I	J
3625A	6.0±0.3	6.0±0.3	2.8±0.5	2.0±0.3	1.9 typ.	2.2 ref.	2.4 ref.	6.7 ref.	2.3 ref.	2.1 ref.
3625B	10.0±0.3	10.0±0.3	4.5±0.3	2.4 typ.	2.0 typ.	6.0 ref.	2.8 ref.	10.4 ref.	2.4 ref.	5.6 ref.
3625C	12.7±0.3	12.7±0.3	4.8±0.3	3.0 typ.	2.0 typ.	8.6 ref.	3.6 ref.	13.6 ref.	2.6 ref.	8.4 ref.

Inductance Vs DC Superposition Characteristics - 3625A Series

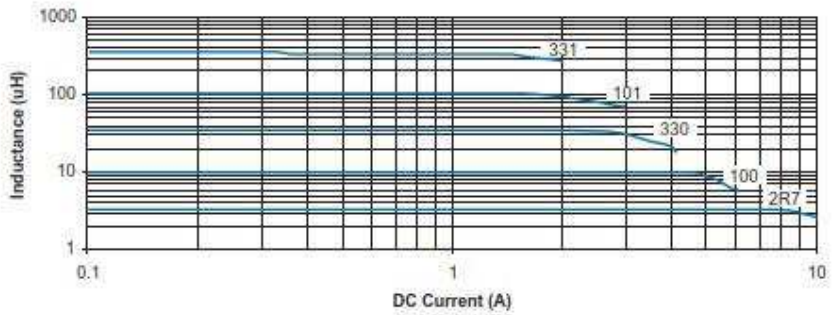


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Inductance Vs DC Superposition Characteristics - 3625B Series



Inductance Vs DC Superposition Characteristics - 3625C Series



Reliability Test

Test Item	Specification	Test Condition
Thermal Shock Test: (Temp Cycle)	$\Delta L \leq 10\%$	Room Temp: $-25 \pm 2^\circ\text{C}$ 15 minutes \rightarrow 30 minutes Room Temp: $85 \pm 2^\circ\text{C}$ 15 minutes \rightarrow 30 minutes Total: 50 cycles
Humidity Resistance Test:	$\Delta L \leq 10\%$	Temperature: $40 \pm 2^\circ\text{C}$ Humidity: 90 - 95% Applied Current: Per spec. Time: 500 hours
High Temp. Resistance Test:	$\Delta L \leq 10\%$	Temperature: $85 \pm 2^\circ\text{C}$ Applied Current: Per spec. Time: 500 hours

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How to Order

3625	A	2R5	M
Common Part	Style	Inductance	Tolerance
3625	A, B or C	See Relevant Table for Inductance Code	K - $\pm 10\%$ M - 20% P - 25%

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