Type 3638 Series

The 3638 series of shielded inductors are available in three different packages. Excellent solderability and high heat resistance, together with Tyco Sigma, quality and reliability make these products suitable for a wide range of electronic equipment applications.

Key Features

- Available in 3 different packages
- Up to 3A
- Low RDC
- Tape and Reeled
- High heat resistance
- Excellent reliability
- Ferrite Core

PRODUCT PLANNED FOR EOL

LTB 18/08/2023

Electrical Characteristics - 3638A Series

Inductance Code	Inductance (µH)	Test Freq. (Hz)	R.D.C. (Ω) Max.	Irms (A)	Isat (A)
1R0	1.0±20%	1K	0.016	3.80	3.00
1R5	1.5±20%	1K	0.020	3.20	250
2R2	2.2±20%	1K	0.032	3.00	220
3R3	3.3±20%	1K	0.044	1.92	1.55
4R7	4.7±20%	1K	0.050	1.80	1.35
6R8	6.8±20%	1K	0.070	1.45	1.20
100	10.0±20%	1K	0.105	1.20	1.00
150	15.0±20%	1K	0.140	1.00	0.80
220	22.0±20%	1K	0.220	0.80	0.65
330	33.0±20%	1K	0.280	0.65	0.55
470	47.0±20%	1K	0.380	0.55	0.48
680	68.0±20%	1K	0.600	0.45	0.38
101	100.0±20%	1K	0.840	0.38	0.31
151	150.0±20%	1K	1.200	0.30	0.26
221	220.0±20%	1K	1.700	0.25	0.22
331	330.0±20%	1K	2.450	0.20	0.17
471	470.0±20%	1K	3.600	0.17	0.14
681	680.0±20%	1K	5.400	0.13	0.11
102	1000.0±20%	1K	8.200	0.11	0.09

Environmental Characteristics - 3638A Series

Storage Temp:	-40°C to +125°C
Operating Temp:	-40°C to +105°C (Temp. rise included)

Electrical Characteristics - 3638B Series

Inductance Code	Inductance (µH)	Q Ref.	Test Freq. (MHz)	S.R.F. (MHz) Typ.	R.D.C. (Ω) Max.	Irms (A)	Isat (A)
3R3	3.3±20%	16	7.96	55.0	0.027	2.40	2.20
4R7	4.7±20%	16	7.96	43.0	0.042	2.00	2.00
6R8	6.8±20%	17	7.96	37.0	0.054	1.60	1.80
100	10.0±20%	25	2.52	35.0	0.068	1.40	1.60
150	15.0±20%	22	2.52	32.0	0.095	1.10	1.20
220	22.0±20%	20	2.52	29.0	0.135	0.96	1.05
330	33.0±20%	23	2.52	20.0	0.200	0.76	0.86
470	47.0±20%	26	2.52	18.0	0.270	0.67	0.70
680	68.0±20%	22	2.52	16.0	0.380	0.60	0.67
101	100.0±20%	28	0.796	12.0	0.540	0.45	0.50
151	150.0±20%	35	0.796	10.0	0.800	0.37	0.38
221	220.0±20%	47	0.796	7.5	1.300	0.30	0.32
331	330.0±20%	46	0.796	6.1	1.900	0.22	0.24
471	470.0±20%	34	0.796	5.1	2.400	0.20	0.20
681	680.0±20%	58	0.796	3.8	3.750	0.16	0.15
102	1000.0±20%	120	0.252	3.1	5.400	0.15	0.14

Type 3638 Series

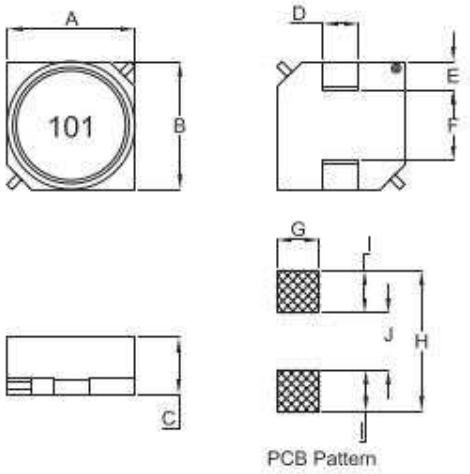
Electrical Characteristics - 3638C Series

Inductance Code	Inductance (µH)	Q Ref.	Test Freq. (MHz)	S.R.F. (MHz) Typ.	R.D.C. (Ω) Max.	Irms (A)	Isat (A)
100	10±20%	30	2.52	25	0.042	2.00	1.70
150	15±20%	31	2.52	24	0.062	1.60	1.35
220	22±20%	26	2.52	18	0.082	1.35	1.10
330	33±20%	25	2.52	12	0.115	1.15	0.90
470	47±20%	29	2.52	11	0.150	0.95	0.78
680	68±20%	22	2.52	10	0.210	0.77	0.60
101	100±20%	40	0.796	8	0.300	0.65	0.50
151	150±20%	51	0.796	7	0.480	0.53	0.41
221	220±20%	44	0.796	5	0.700	0.45	0.36
331	330±20%	65	0.796	4	0.730	0.40	0.25
471	470±20%	80	0.796	3	1.100	0.32	0.22
681	680±20%	65	0.796	3	1.600	0.27	0.20
102	1000±20%	90	0.252	3	2.400	0.25	0.15

Environmental Characteristics - B, C Series

Storage Temp:	-40°C to +125°C
Operating Temp:	-25°C to +105°C
Temp Rise:	30°C Max.

Dimensions A, B, C Series



Series	A	B	C	D	E	F	G	H	I	J
3638A	6.0±0.3	6.0±0.3	2.8±0.3	2.0±0.3	1.9 typ.	2.2 ref.	2.4 ref.	6.7 ref.	2.3 ref.	2.1 ref.
3638B	7.0±0.3	7.0±0.3	3.2±0.3	2.0 typ.	1.5 typ.	4.0 typ.	2.4 ref.	7.8 ref.	1.8 ref.	4.2 ref.
3638C	7.0±0.3	7.0±0.3	4.5±0.3	2.0 typ.	1.5 typ.	4.0 typ.	2.4 ref.	7.8 ref.	1.8 ref.	4.2 ref.

Type 3638 Series

Reliability Test - A, B, C Series

Test Item	Specification	Test Condition
Thermal Shock Test: (Temp Cycle)	ΔL ≤ 20%	Room Temp → -25± 2°C 15 minutes → 30 minutes Room Temp → 85± 2°C 15 minutes → 30 minutes Total: 50 cycles
Humidity Resistance Test:	ΔL ≤ 20%	Temperature: 40± 2°C Humidity: 90 ~ 95% Applied Current: Per spec. Time: 500 hours
High Temp. Resistance Test:	ΔL ≤ 20%	Temperature: 105± 2°C (125± 2°C - A Series) Applied Current: Per spec. Time: 500 hours

How to Order

3638	A	220	M
Common Part	Style	Inductance	Tolerance
3638	A, B or C	See Relevant Table for Inductance Code	M - 20%