

Features/特徴

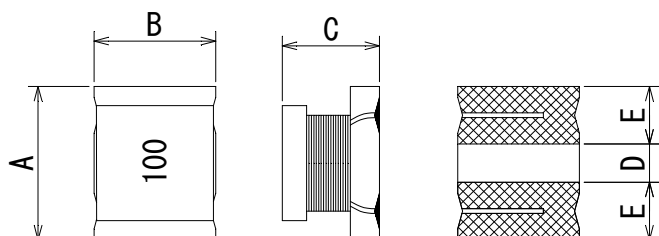
- Small size and low profile.
小型・低背タイプ。
- High reliability for mechanical strength.
高信頼で機械的強度が高い。



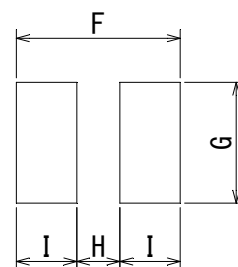
Applications/用途

- Variety of DC-DC converter inductor applications.
種々のDC-DC コンバータに応用出来ます。

Dimensions



Recommended Pattern



Series Name	Dimensions								
	A	B	C	D	E	F	G	H	I
TZNS3216	3.2±0.3	2.5±0.3	1.55±0.15	1.3 Typ.	1.2 Typ.	3.8 Typ.	2.8 Typ.	1.0 Typ.	1.4 Typ.
TZNS322515	3.2±0.3	1.6±0.3	1.85±0.3	1.1 Typ.	0.9 Min.	3.8 Typ.	2.0 Typ.	1.5 Typ.	0.8 Typ.
TZNS322520	3.2±0.3	2.5±0.3	2.0±0.3	1.3 Typ.	1.2 Typ.	3.8 Typ.	2.8 Typ.	1.0 Typ.	1.4 Typ.
TZNS4532	4.5±0.3	3.2±0.3	2.6±0.3	1.3 Typ.	1.6 Typ.	5.4 Typ.	3.6 Typ.	1.3 Typ.	2.0 Typ.
TZNS5750	5.7±0.3	5.0±0.3	4.7±0.5	1.7 Typ.	2.0 Typ.	6.4 Typ.	5.4 Typ.	2.2 Typ.	2.3 Typ.

Electrical Characteristics

• TZNS3216 (3.2x2.5mm, 1.8mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (Ω) Max.	Rated current (A) Typ.
		(%)		
TZNS3216-1R0	1.0	± 20	0.078	1.00
TZNS3216-2R2	2.2	± 20	0.126	0.79
TZNS3216-4R7	4.7	± 20	0.195	0.65
TZNS3216-6R8	6.8	± 20	0.325	0.54
TZNS3216-100	10	± 10	0.390	0.45
TZNS3216-150	15	± 10	0.754	0.30
TZNS3216-220	22	± 10	0.923	0.25
TZNS3216-330	33	± 10	1.430	0.20
TZNS3216-470	47	± 10	1.690	0.17
TZNS3216-680	68	± 10	2.860	0.13
TZNS3216-101	100	± 10	4.550	0.10

• Inductance test condition : 1MHz/0.1V

• TZNS322515 (3.2x1.6mm, 2.0mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (Ω) Max.	Rated current (A) Typ.
		(%)		
TZNS322515-R12	0.12	± 30	0.112	0.97
TZNS322515-R22	0.22	± 30	0.140	0.85
TZNS322515-R33	0.33	± 30	0.160	0.80
TZNS322515-R47	0.47	± 30	0.210	0.70
TZNS322515-1R0	1.0	± 20	0.392	0.51
TZNS322515-2R2	2.2	± 20	0.574	0.43
TZNS322515-4R7	4.7	± 20	0.910	0.34
TZNS322515-4R7	6.8	± 20	1.30	0.28
TZNS322515-100	10	± 10	1.82	0.23
TZNS322515-220	22	± 10	4.20	0.18
TZNS322515-270	27	± 10	4.50	0.15
TZNS322515-470	47	± 10	11.20	0.10
TZNS322515-101	100	± 10	16.80	0.08

• Inductance test condition : 1MHz/0.25V

Electrical Characteristics

• TZNS322520 (3.2x2.5mm, 2.3mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (Ω) Max.	Rated current (A) Typ.
		(%)		
TZNS322520-1R0	1.0	± 20	0.100	0.750
TZNS322520-1R2	1.2	± 20	0.120	0.720
TZNS322520-1R5	1.5	± 20	0.130	0.660
TZNS322520-1R8	1.8	± 20	0.140	0.640
TZNS322520-2R2	2.2	± 20	0.150	0.620
TZNS322520-2R7	2.7	± 20	0.180	0.600
TZNS322520-3R3	3.3	± 20	0.200	0.580
TZNS322520-3R9	3.9	± 20	0.250	0.540
TZNS322520-4R7	4.7	± 20	0.280	0.490
TZNS322520-5R6	5.6	± 20	0.360	0.440
TZNS322520-6R8	6.8	± 20	0.400	0.420
TZNS322520-8R2	8.2	± 20	0.45	0.390
TZNS322520-100	10	± 10	0.65	0.320
TZNS322520-120	12	± 10	0.70	0.290
TZNS322520-150	15	± 10	1.00	0.270
TZNS322520-180	18	± 10	1.10	0.240
TZNS322520-220	22	± 10	1.30	0.220
TZNS322520-270	27	± 10	1.60	0.165
TZNS322520-330	33	± 10	1.85	0.160
TZNS322520-390	39	± 10	2.00	0.150
TZNS322520-470	47	± 10	3.00	0.146
TZNS322520-560	56	± 10	3.20	0.138
TZNS322520-680	68	± 10	3.80	0.130
TZNS322520-820	82	± 10	5.60	0.105
TZNS322520-101	100	± 10	6.50	0.100
TZNS322520-121	120	± 10	7.00	0.095
TZNS322520-151	150	± 10	9.20	0.086
TZNS322520-181	180	± 10	10.20	0.080
TZNS322520-221	220	± 10	11.80	0.075
TZNS322520-271	270	± 10	14.80	0.070
TZNS322520-331	330	± 10	16.50	0.065
TZNS322520-391	390	± 10	22.00	0.060
TZNS322520-471	470	± 10	25.00	0.055
TZNS322520-561	560	± 10	28.00	0.048

• Inductance test condition : 1.0 μ H~390 μ H at 1MHz/1V
: 470 μ H~560 μ H at 1kHz/1V

Electrical Characteristics

• TZNS4532 (4.5x3.2mm, 3.0mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (Ω) Max.	Rated current (A) Typ.
		(%)		
TZNS4532-1R0	1.0	± 20	0.080	1.400
TZNS4532-1R5	1.5	± 20	0.090	1.350
TZNS4532-1R8	1.8	± 20	0.100	1.300
TZNS4532-2R2	2.2	± 20	0.110	1.250
TZNS4532-2R7	2.7	± 20	0.120	1.200
TZNS4532-3R3	3.3	± 20	0.130	1.000
TZNS4532-3R9	3.9	± 20	0.140	0.960
TZNS4532-4R7	4.7	± 20	0.150	0.940
TZNS4532-5R6	5.6	± 20	0.180	0.920
TZNS4532-6R8	6.8	± 20	0.200	0.860
TZNS4532-8R2	8.2	± 20	0.250	0.780
TZNS4532-100	10	± 20	0.30	0.750
TZNS4532-120	12	± 20	0.42	0.700
TZNS4532-150	15	± 20	0.50	0.650
TZNS4532-180	18	± 20	0.60	0.570
TZNS4532-220	22	± 10	0.70	0.460
TZNS4532-270	27	± 10	0.90	0.360
TZNS4532-330	33	± 10	1.10	0.330
TZNS4532-390	39	± 10	1.30	0.310
TZNS4532-470	47	± 10	1.50	0.285
TZNS4532-560	56	± 10	1.60	0.270
TZNS4532-680	68	± 10	2.10	0.230
TZNS4532-820	82	± 10	2.20	0.215
TZNS4532-101	100	± 10	2.50	0.200
TZNS4532-121	120	± 10	3.00	0.180
TZNS4532-151	150	± 10	3.70	0.165
TZNS4532-181	180	± 10	4.50	0.145
TZNS4532-221	220	± 10	5.40	0.130
TZNS4532-271	270	± 10	8.00	0.110
TZNS4532-331	330	± 10	11.50	0.100
TZNS4532-391	390	± 10	13.00	0.095
TZNS4532-471	470	± 10	14.20	0.085
TZNS4532-561	560	± 10	15.50	0.080
TZNS4532-681	680	± 10	16.80	0.075
TZNS4532-821	820	± 10	20.00	0.070
TZNS4532-102	1,000	± 10	30.00	0.060
TZNS4532-122	1,200	± 10	33.50	0.045
TZNS4532-152	1,500	± 10	38.50	0.040
TZNS4532-182	1,800	± 10	44.00	0.035
TZNS4532-222	2,200	± 10	47.00	0.030

• Inductance test condition : 1.0 μ H $\sim$ 390 μ H at 1MHz/1V
: 470 μ H $\sim$ 2,200 μ H at 1kHz/1V

Electrical Characteristics

• TZNS5750 (5.7x5.0mm, 5.2mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (Ω) Max.	Rated current (A) Typ.
		(%)		
TZNS5750-R47	0.5	± 20	0.018	4.80
TZNS5750-1R0	1.0	± 20	0.027	4.00
TZNS5750-1R5	1.5	± 20	0.031	3.70
TZNS5750-2R2	2.2	± 20	0.041	3.20
TZNS5750-3R3	3.3	± 20	0.050	2.90
TZNS5750-4R7	4.7	± 20	0.057	2.70
TZNS5750-6R8	6.8	± 20	0.100	2.00
TZNS5750-100	10	± 20	0.130	1.70
TZNS5750-120	12	± 10	0.200	1.50
TZNS5750-150	15	± 10	0.210	1.40
TZNS5750-220	22	± 10	0.270	1.20
TZNS5750-240	24	± 10	0.29	1.10
TZNS5750-270	27	± 10	0.30	1.00
TZNS5750-330	33	± 10	0.45	0.90
TZNS5750-470	47	± 10	0.56	0.80
TZNS5750-680	68	± 10	0.94	0.64
TZNS5750-900	90	± 10	1.19	0.58
TZNS5750-101	100	± 10	1.20	0.56
TZNS5750-121	120	± 10	1.85	0.49
TZNS5750-151	150	± 10	2.66	0.52
TZNS5750-221	220	± 10	3.36	0.32
TZNS5750-331	330	± 10	6.2	0.27
TZNS5750-471	470	± 10	7.6	0.24
TZNS5750-681	680	± 10	11.3	0.19
TZNS5750-102	1,000	± 10	14.4	0.15
TZNS5750-122	1,200	± 10	18.0	0.12
TZNS5750-152	1,500	± 10	30.1	0.10
TZNS5750-222	2,200	± 10	45.0	0.09
TZNS5750-242	2,400	± 10	47.0	0.09
TZNS5750-332	3,300	± 10	50.0	0.08
TZNS5750-472	4,700	± 10	61.0	0.07
TZNS5750-682	6,800	± 10	100.0	0.06
TZNS5750-822	8,200	± 10	125.0	0.05
TZNS5750-103	10,000	± 10	140.0	0.05

• Inductance test condition : 0.5 μ H $\sim$ 6.8 μ H at 100kHz/1V
: 10 μ H $\sim$ 10,000 μ H at 1kHz/1V

Conditions/測定条件

- (1)The saturation current is the current value which causes 30% inductance reduction from the initial value.
直流重畳許容電流は直流重畳された電流によりインダクタンスの値が低下し、30%以内となる直流電流の値です。
- (2)The temperature rise current is the DC current value having temperature increase up to 40°C.
温度上昇許容電流は直流重畳された電流により温度上昇の値が40°Cとなる直流電流の値です。
- (3)The reted current is the DC current that satisfies both ob the saturation current and temperature rise current value.
定格電流は直流重畳許容電流と温度上昇許容電流の両方を満足する直流電流の値です。
- (4)Ambient temperature during measurement: 20°C.
測定時の周囲温度：20°C。