

TZNS Series (3024 • 4024 • 4035 • 5028 • 5035 • 5048 7038 • 7053 • 10057)

Features/特徴

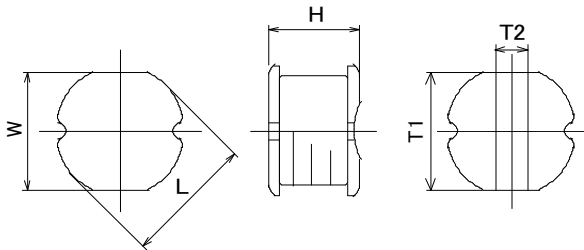
- Small size and high power.
小型・低背タイプ。
- High reliability for mechanical strength.
高信頼で機械的強度が高い。



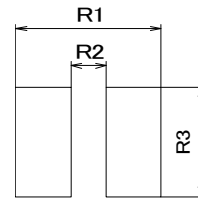
Applications/用途

- 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							
	W	L	H	T1	T2	R1	R2	R3
TZNS3024	3.0±0.3	3.5±0.3	2.4Max	3.0	1.2	3.5	1.2	3.5
TZNS4024	4.0±0.3	4.5±0.3	2.4Max	4.0	1.2	5.0	1.2	5.0
TZNS4035	4.0±0.3	4.5±0.3	3.5Max	4.0	1.2	5.0	1.2	5.0
TZNS5028	5.2±0.3	5.8±0.3	2.8Max	5.2	2.0	6.0	1.6	5.5
TZNS5035	5.2±0.3	5.8±0.3	3.5Max	5.2	2.0	6.0	1.6	5.5
TZNS5048	5.2±0.3	5.8±0.3	4.8Max	5.2	2.0	6.0	1.6	5.5
TZNS7038	7.0±0.3	7.8±0.3	3.8Max	7.0	2.5	8.0	2.0	8.0
TZNS7053	7.0±0.3	7.8±0.3	5.3Max	7.0	2.5	8.0	2.0	8.0
TZNS10057	9.0±0.3	10.0±0.3	5.7Max	9.0	2.9	12.5	2.5	9.5

Electrical Characteristics

• TZNS3024 (3.5x3.0mm, 2.4mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) Max.	Rated current (mA) Typ.
		(%)		
TZNS3024-2R2	2.2	± 30	60	1,400
TZNS3024-3R3	3.3	± 30	90	1,250
TZNS3024-4R7	4.7	± 30	132	1,000
TZNS3024-6R8	6.8	± 30	148	850
TZNS3024-100	10	± 20	240	750
TZNS3024-150	15	± 20	360	600
TZNS3024-220	22	± 20	500	500
TZNS3024-330	33	± 20	740	450
TZNS3024-470	47	± 20	1,200	300

• TZNS4024 (4.5x4.0mm, 2.4mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) Max.	Rated current (mA) Typ.
		(%)		
TZNS4024-1R0	1.0	± 30	25	3,600
TZNS4024-2R2	2.2	± 30	80	2,000
TZNS4024-3R3	3.3	± 30	110	1,700
TZNS4024-4R7	4.7	± 30	130	1,600
TZNS4024-6R8	6.8	± 30	170	1,400
TZNS4024-100	10	± 20	230	1,200
TZNS4024-150	15	± 20	306	1,000
TZNS4024-220	22	± 20	390	900
TZNS4024-470	47	± 20	840	600

• TZNS4035 (4.5x4.0mm, 3.5mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) Max.	Rated current (mA) Typ.
		(%)		
TZNS4035-2R2	2.2	± 30	47	2,600
TZNS4035-3R3	3.3	± 30	58	2,100
TZNS4035-4R7	4.7	± 30	95	1,700
TZNS4035-6R8	6.8	± 30	120	1,400
TZNS4035-100	10	± 20	180	1,100
TZNS4035-150	15	± 20	235	900
TZNS4035-220	22	± 20	380	750
TZNS4035-330	33	± 20	540	640
TZNS4035-470	47	± 20	840	540

Electrical Characteristics

• TZNS5028 (5.8x5.2mm, 2.8mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) Max.	Rated current (mA) Typ.
		(%)		
TZNS5028-2R2	2.2	± 30	35	
TZNS5028-3R3	3.3	± 30	56	2,500
TZNS5028-4R7	4.7	± 30	72	2,200
TZNS5028-6R8	6.8	± 30	98	1,900
TZNS5028-100	10	± 20	145	1,600
TZNS5028-150	15	± 20	200	1,300
TZNS5028-220	22	± 20	285	1,100
TZNS5028-330	33	± 20	400	900
TZNS5028-470	47	± 20	550	750

• TZNS5035 (5.8x5.2mm, 3.5mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) Max.	Rated current (mA) Typ.
		(%)		
TZNS5035-1R0	1.0	± 30	19	4,000
TZNS5035-2R2	2.2	± 30	31	3,600
TZNS5035-3R3	3.3	± 30	40	3,000
TZNS5035-4R7	4.7	± 30	54	2,800
TZNS5035-6R8	6.8	± 30	76	2,000
TZNS5035-100	10	± 20	107	1,800
TZNS5035-150	15	± 20	150	1,500
TZNS5035-220	22	± 20	205	1,300
TZNS5035-470	47	± 20	560	800

• TZNS5048 (5.8x5.2mm, 4.8mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) Max.	Rated current (mA) Typ.
		(%)		
TZNS5048-2R2	2.2	± 30	17	4,500
TZNS5048-3R3	3.3	± 30	34	3,000
TZNS5048-4R7	4.7	± 30	40	2,800
TZNS5048-6R8	6.8	± 30	80	2,500
TZNS5048-100	10	± 20	100	1,440
TZNS5048-150	15	± 20	140	1,200
TZNS5048-220	22	± 20	180	1,100
TZNS5048-330	33	± 20	210	880
TZNS5048-470	47	± 20	370	700

Electrical Characteristics

• TZNS7038 (7.8x7.0mm, 3.8mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) MAX	Rated current (mA) TYP
		(%)		
TZNS7038-2R2	2.2	± 30	23	5,000
TZNS7038-3R3	3.3	± 30	25	4,000
TZNS7038-4R7	4.7	± 30	39	3,500
TZNS7038-6R8	6.8	± 30	40	2,800
TZNS7038-100	10.0	± 20	80	1,440
TZNS7038-150	15.0	± 20	100	1,240
TZNS7038-220	22.0	± 20	130	1,070
TZNS7038-330	33.0	± 20	170	850
TZNS7038-470	47.0	± 20	250	680

• TZNS7053 (7.8x7.0mm, 5.3mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) MAX	Rated current (mA) TYP
		(%)		
TZNS7053-2R2	2.2	± 30	16	5,300
TZNS7053-3R3	3.3	± 30	20	4,500
TZNS7053-4R7	4.7	± 30	26	4,000
TZNS7053-6R8	6.8	± 30	32	3,200
TZNS7053-100	10.0	± 20	48	2,800
TZNS7053-150	15.0	± 20	68	1,800
TZNS7053-220	22.0	± 20	91	1,500
TZNS7053-330	33.0	± 20	130	1,300
TZNS7053-470	47.0	± 20	190	1,100

• TZNS10057 (10.0x9.0mm, 5.7mm Height)

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) MAX	Rated current (mA) TYP
		(%)		
TZNS10057-2R2	2.2	± 30	12	9,000
TZNS10057-3R3	3.3	± 30	13	8,000
TZNS10057-4R7	4.7	± 30	19	6,000
TZNS10057-6R8	6.8	± 30	23	5,800
TZNS10057-100	10.0	± 20	31	5,200
TZNS10057-150	15.0	± 20	43	4,000
TZNS10057-220	22.0	± 20	57	3,600
TZNS10057-330	33.0	± 20	86	2,800
TZNS10057-470	47.0	± 20	115	2,400

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 rated current is the DC current that satisfies both of 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)The measuring frequency and surroundings temperature are 100 kHz and 23°C, respectively.
測定周波数：100 kHz。測定周囲温度：23°C。