

Features/特徴

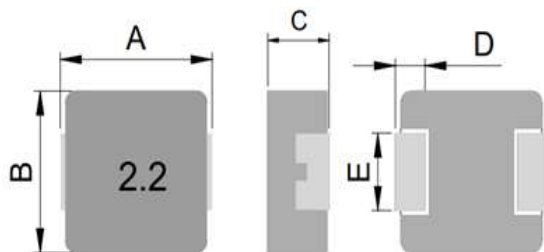
- Small size and low profile.
小型・低背タイプ。
- Uses alloy materials to achieve high current and low DC resistance
合金材料を使用し、大電流と低直流抵抗を実現
- Closed magnetic circuit results in low DC resistance and low leakage flux.
閉磁路により直流抵抗が小さく漏れ磁束が少ない。
- High reliability for mechanical strength.
高信頼で機械的強度が高い。



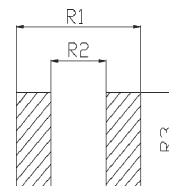
Applications/用途

- DC-DC converters for video and wireless devices, etc.
映像・無線機器のDC-DCコンバーターなど
- 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	R1	R2	R3
TZMS4020CA	4.45±0.25	4.10±0.20	1.80±0.20	0.80±0.25	1.50±0.20	5.2	2.2	2.5
TZMS5030CA	5.70±0.30	5.20±0.20	2.80±0.20	1.00±0.30	2.00±0.20	6.0	2.8	2.5
TZMS6030CA	7.10±0.30	6.60±0.20	2.80±0.20	1.60±0.30	3.00±0.20	8.0	3.7	3.4
TZMS6040CA			3.80±0.20			8.0	3.7	3.4
TZMS6050CA			4.80±0.20			8.0	3.5	3.4
TZMS10030CA	11.0±0.50	10.0±0.30	2.80±0.20	2.00±0.30	3.00±0.20	13.6	5.4	3.5
TZMS10040CA			3.80±0.20			12.5	5.4	3.5
TZMS10050CA			4.80±0.20			12.5	5.4	3.5
TZMS12050CA	13.5±0.50	12.6±0.20	4.70±0.30	2.30±0.30	4.70±0.30	14.5	8.0	5.0
TZMS12060CA			5.70±0.30			14.2	8.0	5.0
TZMS12065CA			6.20±0.30			14.2	8.0	5.0
TZMS17070CA	17.8±0.50	16.9±0.30	6.70±0.30	2.30±0.30	11.9±0.30	18.5	12.0	12.5

Electrical Characteristics

• TZMS4020CA Series

Series Name	Inductance	Inductance	DC Resistance	Rated current	
		Tolerance		Saturation current	Temperature Rise Current
	(μH)	(%)	(mΩ) Max.	(A) Max.	(A) Max.
TZMS4020CA-R10	0.10	±20	3.2	22.0	14.0
TZMS4020CA-R22	0.22	±20	5.5	13.0	12.5
TZMS4020CA-R47	0.47	±20	11.0	8.0	9.0
TZMS4020CA-R68	0.68	±20	13.5	6.6	8.0
TZMS4020CA-R82	0.82	±20	18.8	5.5	7.0
TZMS4020CA-1R0	1.0	±20	22.0	5.0	6.5
TZMS4020CA-1R2	1.2	±20	25.0	4.9	6.2
TZMS4020CA-1R5	1.5	±20	31.0	4.8	5.8
TZMS4020CA-2R2	2.2	±20	48.0	4.0	5.0
TZMS4020CA-3R3	3.3	±20	75.0	2.7	3.5
TZMS4020CA-4R7	4.7	±20	95.0	2.5	3.2
TZMS4020CA-5R6	5.6	±20	115.0	2.3	2.8
TZMS4020CA-6R8	6.8	±20	157.0	2.1	2.5
TZMS4020CA-8R2	8.2	±20	168.0	2.0	2.3
TZMS4020CA-100	10	±20	215.0	1.9	2.2

• TZMS5030CA Series

Series Name	Inductance	Inductance	DC Resistance	Rated current	
		Tolerance		Saturation current	Temperature Rise Current
	(μH)	(%)	(mΩ) Max.	(A) Max.	(A) Max.
TZMS5030CA-R47	0.47	±20	6.0	9.0	12.0
TZMS5030CA-R68	0.68	±20	8.5	8.0	11.0
TZMS5030CA-R82	0.82	±20	9.2	7.7	9.0
TZMS5030CA-1R0	1.0	±20	12.0	7.5	8.0
TZMS5030CA-1R2	1.2	±20	14.4	7.0	7.5
TZMS5030CA-1R5	1.5	±20	15.7	6.5	7.0
TZMS5030CA-2R2	2.2	±20	25.0	5.8	6.5
TZMS5030CA-2R7	2.7	±20	30.0	5.5	6.2
TZMS5030CA-3R3	3.3	±20	33.0	5.3	5.8
TZMS5030CA-4R7	4.7	±20	44.0	4.6	4.8
TZMS5030CA-5R6	5.6	±20	58.0	4.0	4.3
TZMS5030CA-6R8	6.8	±20	66.0	3.1	3.7
TZMS5030CA-100	10	±20	103.0	2.1	3.4

• TZMS6030CA Series

Series Name	Inductance	Inductance	DC Resistance	Rated current	
		Tolerance		Saturation current	Temperature Rise Current
	(μH)	(%)	(mΩ) Max.	(A) Max.	(A) Max.
TZMS6030CA-R15	0.15	±30	2.1	36.0	25.0
TZMS6030CA-R22	0.22	±20	2.5	32.0	21.0
TZMS6030CA-R24	0.24	±20	2.7	24.0	20.5
TZMS6030CA-R33	0.33	±20	3.4	22.0	20.0
TZMS6030CA-R36	0.36	±20	3.9	21.0	18.0
TZMS6030CA-R47	0.47	±20	4.0	18.0	16.0
TZMS6030CA-R56	0.56	±20	4.5	16.0	15.0
TZMS6030CA-R68	0.68	±20	5.3	15.0	14.5
TZMS6030CA-R82	0.82	±20	6.0	14.0	13.0
TZMS6030CA-1R0	1.0	±20	7.4	13.5	11.0
TZMS6030CA-1R2	1.2	±20	9.5	12.5	9.5

Electrical Characteristics

• TZMS6030CA Series

Series Name	Inductance	Inductance	DC Resistance	Rated current	
		Tolerance		Saturation current	Temperature Rise Current
	(μ H)	(%)	(m Ω) Max.	(A) Max.	(A) Max.
TZMS6030CA-1R5	1.5	± 20	12.1	12.0	9.0
TZMS6030CA-1R8	1.8	± 20	13.0	10.0	8.0
TZMS6030CA-2R2	2.2	± 20	15.0	9.0	7.5
TZMS6030CA-2R7	2.7	± 20	20.0	8.8	7.0
TZMS6030CA-3R3	3.3	± 20	22.0	8.5	6.0
TZMS6030CA-4R7	4.7	± 20	33.0	5.5	5.0
TZMS6030CA-5R6	5.6	± 20	42.0	5.2	5.0
TZMS6030CA-6R8	6.8	± 20	50.0	5.0	4.2
TZMS6030CA-8R2	8.2	± 20	60.0	4.7	4.0
TZMS6030CA-100	10	± 20	68.0	4.5	3.5
TZMS6030CA-120	12	± 20	78.0	4.1	3.0
TZMS6030CA-150	15	± 20	140.0	4.0	2.5
TZMS6030CA-180	18	± 20	160.0	3.0	2.3
TZMS6030CA-220	22	± 20	190.0	2.5	2.0

• TZMS6040CA Series

Series Name	Inductance	Inductance	DC Resistance	Rated current	
		Tolerance		Saturation current	Temperature Rise Current
	(μ H)	(%)	(m Ω) Max.	(A) Max.	(A) Max.
TZMS6040CA-R33	0.33	± 20	2.5	25.0	23.0
TZMS6040CA-R45	0.45	± 20	3.2	18.0	23.0
TZMS6040CA-R56	0.56	± 20	3.7	17.0	23.0
TZMS6040CA-1R0	1.0	± 20	6.2	13.5	23.0
TZMS6040CA-6R8	6.8	± 20	38.0	5.8	23.0

• TZMS6050CA Series

Series Name	Inductance	Inductance	DC Resistance	Rated current	
		Tolerance		Saturation current	Temperature Rise Current
	(μ H)	(%)	(m Ω) Max.	(A) Max.	(A) Max.
TZMS6050CA-R15	0.15	± 20	1.7	40.0	32.0
TZMS6050CA-R47	0.47	± 20	3.3	20.0	20.0
TZMS6050CA-R56	0.56	± 20	3.9	18.0	19.0
TZMS6050CA-R68	0.68	± 20	4.1	17.0	18.0
TZMS6050CA-R82	0.82	± 20	5.9	15.0	16.0
TZMS6050CA-1R0	1.0	± 20	6.2	13.0	15.0
TZMS6050CA-1R2	1.2	± 20	7.1	11.0	14.0
TZMS6050CA-1R5	1.5	± 20	7.3	10.5	13.0
TZMS6050CA-1R8	1.8	± 20	9.0	9.0	12.5
TZMS6050CA-2R2	2.2	± 20	11.5	8.5	12.0
TZMS6050CA-3R3	3.3	± 20	16.2	8.0	11.0
TZMS6050CA-4R7	4.7	± 20	24.0	7.5	9.5
TZMS6050CA-5R6	5.6	± 20	33.0	7.2	8.5
TZMS6050CA-6R8	6.8	± 20	36.0	7.0	8.0
TZMS6050CA-8R2	8.2	± 20	45.0	6.0	6.5
TZMS6050CA-100	10	± 20	53.0	5.7	6.0
TZMS6050CA-120	12	± 20	68.0	4.7	4.8
TZMS6050CA-150	15	± 20	85.0	3.2	4.0
TZMS6050CA-220	22	± 20	142.0	3.1	3.6
TZMS6050CA-330	33	± 20	170.0	1.8	2.5
TZMS6050CA-470	47	± 20	320.0	1.5	2.0

Electrical Characteristics

• TZMS10030CA Series

Series Name	Inductance (μH)	Inductance Tolerance	DC Resistance (mΩ) Max.	Rated current	
		(%)		Saturation current (A) Max.	Temperature Rise Current (A) Max.
TZMS10030CA-R22	0.22	±20	1.0	45.0	30.0
TZMS10030CA-R36	0.22	±20	1.4	35.0	25.0
TZMS10030CA-R47	0.22	±20	2.2	32.0	23.0
TZMS10030CA-R82	0.22	±20	3.7	25.0	18.0
TZMS10030CA-2R2	0.22	±20	8.8	16.0	12.0
TZMS10030CA-8R2	0.22	±20	38.00	6.8	6.5

• TZMS10040CA Series

Series Name	Inductance (μH)	Inductance Tolerance	DC Resistance (mΩ) Max.	Rated current	
		(%)		Saturation current (A) Max.	Temperature Rise Current (A) Max.
TZMS10040CA-R15	0.15	±30	0.6	75.0	38.0
TZMS10040CA-R18	0.18	±20	0.6	68.0	36.0
TZMS10040CA-R22	0.22	±20	0.8	60.0	33.0
TZMS10040CA-R33	0.33	±20	1.0	49.0	31.0
TZMS10040CA-R36	0.36	±20	1.2	45.0	29.0
TZMS10040CA-R42	0.42	±20	1.3	42.0	28.5
TZMS10040CA-R45	0.45	±20	1.4	42.0	28.5
TZMS10040CA-R47	0.47	±20	1.5	40.0	28.0
TZMS10040CA-R56	0.56	±20	1.8	29.0	23.0
TZMS10040CA-R68	0.68	±20	2.2	28.0	20.0
TZMS10040CA-R82	0.82	±20	2.5	27.0	19.0
TZMS10040CA-R88	0.88	±20	2.6	27.0	19.0
TZMS10040CA-R90	0.90	±20	2.6	27.0	19.0
TZMS10040CA-1R0	1.0	±20	3.3	26.0	18.0
TZMS10040CA-1R2	1.2	±20	3.8	24.0	17.0
TZMS10040CA-1R5	1.5	±20	4.2	22.0	16.0
TZMS10040CA-1R8	1.8	±20	5.7	20.5	15.0
TZMS10040CA-2R0	2.0	±20	6.1	18.0	14.5
TZMS10040CA-2R2	2.2	±20	6.7	16.0	13.0
TZMS10040CA-3R3	3.3	±20	11.80	14.0	10.0
TZMS10040CA-4R7	4.7	±20	19.00	13.0	8.0
TZMS10040CA-5R6	5.6	±20	22.80	11.5	7.2
TZMS10040CA-6R8	6.8	±20	24.50	11.0	6.8
TZMS10040CA-8R2	8.2	±20	28.00	8.5	6.5
TZMS10040CA-100	10	±20	30.00	7.5	6.1
TZMS10040CA-150	15	±20	45.00	6.0	5.0
TZMS10040CA-220	22	±20	66.00	5.5	4.1

• TZMS10050CA Series

Series Name	Inductance (μH)	Inductance Tolerance	DC Resistance (mΩ) Max.	Rated current	
		(%)		Saturation current (A) Max.	Temperature Rise Current (A) Max.
TZMS10050CA-R30	0.30	±20	0.8	49.0	32.0
TZMS10050CA-R36	0.36	±20	0.9	46.0	30.0
TZMS10050CA-R47	0.47	±20	1.3	40.0	29.0
TZMS10050CA-R68	0.68	±20	1.9	32.0	25.0
TZMS10050CA-1R0	1.0	±20	3.0	30.0	23.0
TZMS10050CA-1R5	1.5	±20	3.8	24.0	21.0
TZMS10050CA-2R2	2.2	±20	5.6	18.0	17.5

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Electrical Characteristics

• TZMS10050CA Series

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) Max.	Rated current	
		(%)		Saturation current (A) Max.	Temperature Rise Current (A) Max.
TZMS10050CA-3R3	3.3	± 20	9.1	15.5	15.0
TZMS10050CA-4R7	4.7	± 20	10.5	14.0	13.0
TZMS10050CA-5R6	5.6	± 20	14.4	12.5	11.0
TZMS10050CA-6R8	6.8	± 20	17.3	12.0	10.0
TZMS10050CA-8R2	8.2	± 20	18.8	11.5	8.5
TZMS10050CA-100	10	± 20	21.8	11.0	7.2
TZMS10050CA-150	15	± 20	39.0	7.5	6.0
TZMS10050CA-220	22	± 20	54.0	5.5	5.5
TZMS10050CA-330	33	± 20	86.0	5.2	5.0
TZMS10050CA-470	47	± 20	127.0	4.0	4.0
TZMS10050CA-101	100	± 20	290.0	2.4	2.0

• TZMS12050CA Series

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) Max.	Rated current	
		(%)		Saturation current (A) Max.	Temperature Rise Current (A) Max.
TZMS12050CA-R47	0.5	± 20	0.9	58.0	34.0
TZMS12050CA-R68	0.7	± 20	1.6	42.0	31.0
TZMS12050CA-1R0	1.0	± 20	1.9	34.0	27.0
TZMS12050CA-1R5	1.5	± 20	3.8	28.0	22.0
TZMS12050CA-2R2	2.2	± 20	4.8	23.0	15.5
TZMS12050CA-3R3	3.3	± 20	7.0	20.5	14.0
TZMS12050CA-4R7	4.7	± 20	10.2	16.0	12.5
TZMS12050CA-6R8	6.8	± 20	16.0	15.0	11.0
TZMS12050CA-100	10	± 20	22.0	10.5	9.0
TZMS12050CA-150	15	± 20	36.0	9.2	8.2

• TZMS12060CA Series

Series Name	Inductance (μ H)	Inductance Tolerance	DC Resistance (m Ω) Max.	Rated current	
		(%)		Saturation current (A) Max.	Temperature Rise Current (A) Max.
TZMS12060CA-R36	0.36	± 20	0.80	60.0	50.0
TZMS12060CA-R82	0.82	± 20	1.70	36.0	30.0
TZMS12060CA-1R0	1.0	± 20	2.00	29.0	26.0
TZMS12060CA-1R5	1.5	± 20	3.00	27.0	24.0
TZMS12060CA-2R2	2.2	± 20	4.3	24.0	21.0
TZMS12060CA-3R3	3.3	± 20	6.5	24.0	18.0
TZMS12060CA-4R7	4.7	± 20	8.4	19.5	16.0
TZMS12060CA-5R6	5.6	± 20	10.8	17.0	14.0
TZMS12060CA-8R2	8.2	± 20	16.0	15.5	12.0
TZMS12060CA-100	10	± 20	18.6	14.5	10.5
TZMS12060CA-150	15	± 20	29.0	9.0	8.5
TZMS12060CA-220	22	± 20	37.5	8.0	7.0
TZMS12060CA-330	33	± 20	68.0	6.7	5.5
TZMS12060CA-470	47	± 20	88.0	5.5	4.5
TZMS12060CA-560	56	± 20	108.0	5.3	4.1
TZMS12060CA-680	68	± 20	124.0	5.0	3.7
TZMS12060CA-101	100	± 20	195.0	4.0	2.8
TZMS12060CA-151	150	± 20	325.0	3.2	2.2

Electrical Characteristics

• TZMS12065CA Series

Series Name	Inductance	Inductance	DC Resistance	Rated current	
	(μH)	Tolerance		Saturation current	Temperature Rise Current
		(%)		(A) Max.	(A) Max.
TZMS12065CA-R22	0.22	±20	0.46	105.0	42.0
TZMS12065CA-R33	0.33	±20	0.70	65.0	36.0
TZMS12065CA-R47	0.47	±20	1.02	58.0	35.0
TZMS12065CA-R50	0.50	±20	1.10	55.0	34.0
TZMS12065CA-R56	0.56	±20	1.30	50.0	33.5
TZMS12065CA-R68	0.68	±20	1.50	46.0	33.0
TZMS12065CA-R82	0.82	±20	1.65	39.0	31.0
TZMS12065CA-1R0	1.0	±20	1.80	36.0	29.0
TZMS12065CA-1R2	1.2	±20	2.20	33.0	27.0
TZMS12065CA-1R5	1.5	±20	2.53	30.0	25.0
TZMS12065CA-1R8	1.8	±20	3.60	27.0	23.0
TZMS12065CA-2R2	2.2	±20	4.20	24.0	21.0
TZMS12065CA-2R4	2.4	±20	4.50	23.5	20.5
TZMS12065CA-2R7	2.7	±20	5.00	23.0	20.0
TZMS12065CA-3R3	3.3	±20	6.20	22.5	19.0
TZMS12065CA-4R7	4.7	±20	8.00	21.0	17.0
TZMS12065CA-5R6	5.6	±20	9.80	19.5	15.0
TZMS12065CA-6R0	6.0	±20	10.40	19.0	14.5
TZMS12065CA-6R8	6.8	±20	11.30	18.0	14.0
TZMS12065CA-8R2	8.2	±20	13.80	17.0	12.5
TZMS12065CA-100	10	±20	15.80	15.0	11.0
TZMS12065CA-150	15	±20	26.00	12.0	9.5
TZMS12065CA-220	22	±20	35.00	9.0	8.0
TZMS12065CA-270	27	±20	45.00	8.0	7.2
TZMS12065CA-330	33	±20	55.00	8.0	6.5
TZMS12065CA-470	47	±20	67.00	6.8	5.7
TZMS12065CA-680	68	±20	100.00	5.0	4.8
TZMS12065CA-820	82	±20	132.00	4.2	4.0
TZMS12065CA-101	100	±20	161.00	4.0	3.8

Electrical Characteristics

• TZMS17070CA Series

Series Name	Inductance (μH)	Inductance Tolerance (%)	DC Resistance (mΩ) Max.	Rated current	
				Saturation current (A) Max.	Temperature Rise Current (A) Max.
TZMS17070CA-R47	0.47	±20	0.9	100.0	55.0
TZMS17070CA-R56	0.56	±20	1.0	70.0	50.0
TZMS17070CA-1R0	1.0	±20	1.3	45.0	42.0
TZMS17070CA-1R5	1.5	±20	1.8	40.0	35.0
TZMS17070CA-1R8	1.8	±20	2.0	34.0	32.0
TZMS17070CA-2R0	2.0	±20	2.1	33.0	31.0
TZMS17070CA-2R2	2.2	±20	2.2	32.0	30.0
TZMS17070CA-3R3	3.3	±20	3.3	29.0	28.0
TZMS17070CA-4R0	4.0	±20	4.3	27.0	27.0
TZMS17070CA-4R7	4.7	±20	4.5	26.0	26.0
TZMS17070CA-5R6	5.6	±20	6.0	23.0	23.0
TZMS17070CA-6R8	6.8	±20	7.2	22.0	22.0
TZMS17070CA-100	10	±20	10.60	19.0	19.0
TZMS17070CA-150	15	±20	15.50	14.0	14.0
TZMS17070CA-180	18	±20	20.00	12.0	12.5
TZMS17070CA-220	22	±20	24.00	11.5	11.5
TZMS17070CA-330	33	±20	37.00	10.0	10.0
TZMS17070CA-470	47	±20	47.00	8.0	8.0
TZMS17070CA-680	68	±20	76.00	7.2	6.5
TZMS17070CA-820	82	±20	83.00	6.5	5.7
TZMS17070CA-101	100	±20	105.00	5.5	5.0

Conditions/測定条件

- (1) When the rated current is energized, the temperature rises below 40°C, and the inductance value decreases to within 30%.
定格電流通電時、温度上昇40°C以下、インダクタンス値低下30%以内です。
- (2) Operating temperature : -55°C~125°C (Including temperature rise)
動作温度 : -55°C~125°C (温度上昇を含む)
- (3) Storage condition、Temperature : -20°C~80°C、Humidity : 5%~85% (No dewdrop)
保存条件、温度 : -20°C~80°C、湿度 : 5%~85% (結露無き事)
- (4) The measuring frequency and surroundings temperature are 100KHz/1.0V and 23°C, respectively.
測定周波数 : 100KHz/1.0V、測定周囲温度 : 23°C。