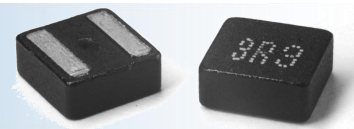


SMD Flat line Assembly Molding Power Inductor ACKSTT&ACKSTW Series



Operating Temp. : -55°C~+150°C

FEATURES:

- Extremely low DCR and ultra-low AC losses for high switching frequencies
- Closed magnetic circuit design reduces leakage flux
- Superior current handling with soft saturation characteristics
- AEC-Q200 verified

APPLICATIONS:

- ADAS, Infotainment system
- LED lighting
- Airbag, ECM, BCM etc.

PART NUMBERING SYSTEM:

ACKSTW(T)(H) 0603 - 1uH / M □□□

- ① ② ③ ④ ⑤
- ①: Automobile Type ②: External Dimensions
- ③: Inductance Value ④: Inductance Tolerance
- ⑤: Inter Code

SHAPES AND DIMENSIONS: (Unit:mm)

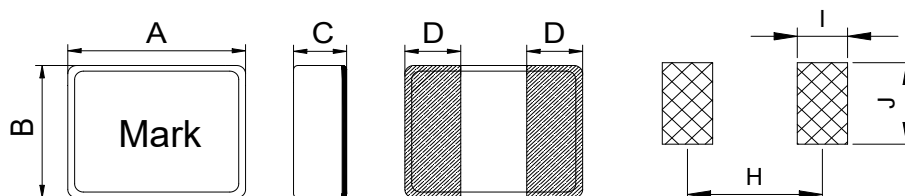


Fig1

Recommended patterns

SERIES	A	B	C	D	H	I	J	Fig
ACKSTT0402	4.0±0.3	4.0±0.3	2.1 Max	1.1±0.3	3.5	1.5	4.5	1
ACKSTT0403	4.0±0.3	4.0±0.3	3.1 Max.	1.1±0.3	3.5	1.5	4.5	1
ACKSTT0502	5.28±0.3	5.48±0.3	2.1 Max.	1.7±0.3	3.8	2.2	6.0	1
ACKSTT0503	5.28±0.3	5.48±0.3	3.1 Max.	1.7±0.3	3.8	2.2	6.0	1
ACKSTTH0505	5.28±0.3	5.48±0.3	5.1 Max.	1.7±0.3	3.8	2.2	6.0	1



**SHAPES AND
DIMENSIONS:**
(Unit:mm)

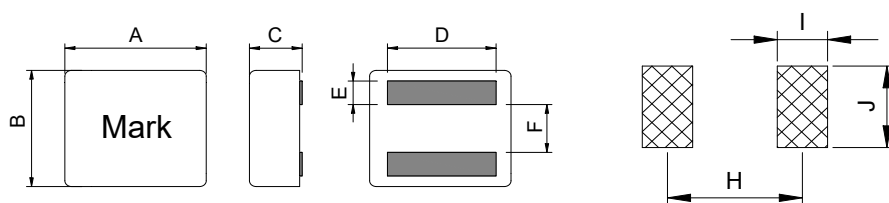


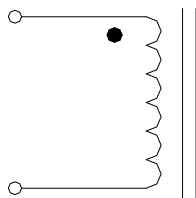
Fig2

Recommended patterns

SERIES	A	B	C	D	E	F	H	I	J	Fig
ACKSTW0402S	4.0±0.3	4.0±0.3	2.1 Max.	3.25 Typ.	0.85±0.2	1.57±0.3	2.37	1.10	3.80	2
ACKSTW0403S	4.0±0.3	4.0±0.3	3.1 Max.	3.25 Typ.	0.85±0.2	1.57±0.3	2.37	1.10	3.80	2
ACKSTW0502S	5.48±0.3	5.28±0.3	2.1 Max.	4.2 Typ.	1.0±0.2	2.3±0.3	3.30	1.30	4.70	2
ACKSTW0503S	5.48±0.3	5.28±0.3	3.1 Max.	4.2 Typ.	1.0±0.2	2.3±0.3	3.30	1.30	4.70	2
ACKSTW0603S	6.6±0.3	6.4±0.3	3.1 Max.	5.0 Typ.	1.25±0.2	2.8±0.3	4.05	1.55	5.50	2
ACKSTWH0606S	6.6±0.3	6.4±0.3	6.1 Max.	5.0 Typ.	1.25±0.2	2.8±0.3	4.05	1.55	5.50	2
ACKSTWH0805S	8.6±0.3	8.1±0.3	5.0 Max.	6.5 Typ.	1.6±0.2	3.56±0.3	5.20	2.00	7.00	2
ACKSTWH0806S	8.6±0.3	8.1±0.3	6.0 Max.	6.5 Typ.	1.6±0.2	3.56±0.3	5.20	2.00	7.00	2
ACKSTWH0807S	8.6±0.3	8.1±0.3	7.0 Max.	6.5 Typ.	1.6±0.2	3.56±0.3	5.20	2.00	7.00	2
ACKSTWH0808S	8.6±0.3	8.1±0.3	8.0 Max.	6.5 Typ.	1.6±0.2	3.56±0.3	5.20	2.00	7.00	2
ACKSTW1003S	11.3±0.5	10.0±0.5	3.0 Max.	8.0 Typ.	2.2±0.2	4.45±0.3	6.65	2.60	9.00	2
ACKSTW1004S	11.3±0.5	10.0±0.5	4.0 Max.	8.0 Typ.	2.2±0.2	4.45±0.3	6.65	2.60	9.00	2
ACKSTWH1006S	11.3±0.5	10.0±0.5	6.0 Max.	8.0 Typ.	2.2±0.2	4.45±0.3	6.65	2.60	9.00	2
ACKSTWH1007S	11.3±0.5	10.0±0.5	7.0 Max.	8.0 Typ.	2.2±0.2	4.45±0.3	6.65	2.60	9.00	2
ACKSTWH1008S	11.3±0.5	10.0±0.5	8.0 Max.	8.0 Typ.	2.2±0.2	4.45±0.3	6.65	2.60	9.00	2
ACKSTWH1010S	11.3±0.5	10.0±0.5	10.0 Max.	8.0 Typ.	2.2±0.2	4.45±0.3	6.65	2.60	9.00	2
ACKSTWH1507S	16.2±0.3	15.2±0.3	7.0 Max.	12.5 Typ.	3.0±0.3	7.6±0.3	10.60	3.50	13.20	2
ACKSTWH1508S	16.2±0.3	15.2±0.3	8.0 Max.	12.5 Typ.	3.0±0.3	7.6±0.3	10.60	3.50	13.20	2
ACKSTWH1510S	16.2±0.3	15.2±0.3	10.0 Max.	12.5 Typ.	3.0±0.3	7.6±0.3	10.60	3.50	13.20	2
ACKSTWH1513S	16.2±0.3	15.2±0.3	13.0 Max.	12.5 Typ.	3.0±0.3	7.6±0.3	10.60	3.50	13.20	2



SCHEMATIC:



ACKSTT0402 Series

**SPECIFICATION
TABLE:**

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTT0402-0.47uH/M	0.47±20%	4.00	4.80	17.20	20.10
ACKSTT0402-0.6uH/M	0.6±20%	4.90	5.70	12.00	18.50
ACKSTT0402-0.68uH/M	0.68±20%	5.90	6.80	15.00	16.70
ACKSTT0402-1uH/M	1±20%	7.50	8.50	11.00	12.40
ACKSTT0402-1.5uH/M	1.5±20%	13.00	14.30	10.00	11.10
ACKSTT0402-2.2uH/M	2.2±20%	18.10	20.00	7.50	9.00
ACKSTT0402-3.3uH/M	3.3±20%	28.60	31.50	7.00	7.30
ACKSTT0402-4.7uH/M	4.7±20%	43.00	47.30	6.00	5.60
ACKSTT0402-5.6uH/M	5.6±20%	45.00	49.50	5.00	5.30
ACKSTT0402-6.8uH/M	6.8±20%	74.40	85.00	5.00	4.00
ACKSTT0402L-6.8uH/M	6.8±20%	63.60	70.00	4.50	4.20
ACKSTT0402-8.2uH/M	8.2±20%	71.00	78.10	4.00	4.10
ACKSTT0402-8.2uH/M	8.2±20%	67.00	73.00	4.00	4.10
ACKSTT0402-10uH/M	10±20%	100.00	115.00	4.00	2.70
ACKSTT0402-15uH/M	15±20%	170.00	200.00	2.40	2.00

ACKSTT0403 Series

**SPECIFICATION
TABLE:**

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTT0403-1uH/M	1±20%	6.50	7.20	14.00	13.00
ACKSTT0403-1.2uH/M	1.2±20%	7.90	9.00	14.00	12.30
ACKSTT0403-1.5uH/M	1.5±20%	8.50	9.40	10.50	12.20
ACKSTT0403-2.2uH/M	2.2±20%	13.50	15.00	10.00	8.70
ACKSTT0403-3.3uH/M	3.3±20%	22.30	24.60	7.00	7.30
ACKSTT0403L-3.3uH/M	3.3±20%	18.00	20.70	7.00	7.70
ACKSTT0403-4.7uH/M	4.7±20%	35.20	38.80	6.00	5.50
ACKSTT0403L-4.7uH/M	4.7±20%	26.70	30.70	6.70	6.70
ACKSTT0403-5.6uH/M	5.6±20%	31.50	34.70	6.00	5.50
ACKSTT0403-6.8uH/M	6.8±20%	43.50	47.90	5.50	4.70
ACKSTT0403-8.2uH/M	8.2±20%	45.60	52.50	4.50	4.40
ACKSTT0403-10uH/M	10±20%	63.00	69.50	5.00	3.90
ACKSTT0403-12uH/M	12±20%	78.50	86.50	4.50	3.40

ACKSTT0502 Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTT0502-0.47uH/M	0.47±20%	3.70	4.30	18.00	22.10
ACKSTT0502-0.68uH/M	0.68±20%	4.70	5.60	17.50	18.30
ACKSTT0502-0.82uH/M	0.82±20%	4.70	5.60	12.30	18.30
ACKSTT0502-1uH/M	1±20%	5.90	7.10	14.00	17.10
ACKSTT0502-1.2uH/M	1.2±20%	5.90	7.10	11.20	17.10
ACKSTT0502-1.5uH/M	1.5±20%	9.40	11.30	11.90	13.00
ACKSTT0502-1.8uH/M	1.8±20%	9.40	11.30	8.30	13.00
ACKSTT0502-2.2uH/M	2.2±20%	12.70	15.30	9.80	11.90
ACKSTT0502-3.3uH/M	3.3±20%	18.80	22.60	6.50	10.40
ACKSTT0502-4.7uH/M	4.7±20%	32.00	36.00	6.80	8.50
ACKSTT0502-5.6uH/M	5.6±20%	33.50	40.20	4.90	8.00
ACKSTT0502-6.8uH/M	6.8±20%	51.00	61.20	4.50	5.10
ACKSTT0502-8.2uH/M	8.2±20%	56.10	67.40	4.10	4.80

ACKSTT0503 Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTT0503-0.8uH/M	0.8±20%	3.80	4.60	18.60	21.10
ACKSTT0503-0.9uH/M	0.9±20%	4.00	4.80	14.50	19.80
ACKSTT0503-1uH/M	1±20%	4.80	5.80	17.00	17.80
ACKSTT0503-1.2uH/M	1.2±20%	4.80	5.80	13.00	16.90
ACKSTT0503-1.5uH/M	1.5±20%	6.80	7.90	16.00	15.40
ACKSTT0503-1.8uH/M	1.8±20%	6.70	7.80	10.60	15.40
ACKSTT0503-2.2uH/M	2.2±20%	9.20	10.60	11.00	12.90
ACKSTT0503-3.3uH/M	3.3±20%	13.30	14.90	10.00	10.00
ACKSTT0503-4.7uH/M	4.7±20%	17.30	20.80	7.00	8.80
ACKSTT0503-5.6uH/M	5.6±20%	23.60	26.50	6.00	8.00
ACKSTT0503-6.8uH/M	6.8±20%	27.30	30.60	7.00	7.40
ACKSTT0503-8.2uH/M	8.2±20%	32.90	37.00	5.00	6.50
ACKSTT0503-10uH/M	10±20%	37.60	42.40	5.50	6.20
ACKSTT0503-12uH/M	12±20%	50.00	56.50	4.00	5.40
ACKSTT0503-15uH/M	15±20%	68.80	77.10	4.50	4.50
ACKSTT0503-18uH/M	18±20%	78.00	93.60	3.30	4.10
ACKSTT0503-22uH/M	22±20%	106.00	118.80	3.00	3.60

ACKSTTH0505 Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTTH0505-1.8uH/M	1.8±20%	6.50	7.80	11.40	15.30
ACKSTTH0505-2.2uH/M	2.2±20%	6.80	8.20	10.90	13.80
ACKSTTH0505-3.3uH/M	3.3±20%	10.00	11.50	9.00	11.30
ACKSTTH0505-4.7uH/M	4.7±20%	13.40	15.60	8.50	9.70
ACKSTTH0505-5.6uH/M	5.6±20%	16.60	18.30	7.30	8.10
ACKSTTH0505-6.8uH/M	6.8±20%	20.20	22.30	7.00	7.60
ACKSTTH0505-8.2uH/M	8.2±20%	22.60	25.00	6.80	7.20
ACKSTTH0505-10uH/M	10±20%	30.00	33.00	5.50	6.20
ACKSTTH0505-12uH/M	12±20%	34.60	38.10	5.40	5.30
ACKSTTH0505-15uH/M	15±20%	45.30	50.00	6.00	4.70
ACKSTTH0505-18uH/M	18±20%	56.50	62.50	3.70	4.50
ACKSTTH0505-22uH/M	22±20%	72.10	79.50	3.80	4.00
ACKSTTH0505-33uH/M	33±20%	107.00	118.00	2.50	3.20

- ⊙ All test data is reference to 25℃ ambient.
- ⊙ Test Condition: 1MHz, 1Vrms.
- ⊙ Isat Typ : DC current (A) that will cause L0 to drop approximately 30%.
- ⊙ Irms Typ: DC current (A) that will cause an approximate ΔT of 40℃.
- ⊙ Operat between temperature range -55℃ to +150℃(Including self - temperature rise).
- ⊙ Absolute maximum voltage: DC 30V.

ACKSTW0402S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTW0402S-0.22uH/M	0.22±20%	2.30	2.70	24.0	24.0
ACKSTW0402S-0.33uH/M	0.33±20%	3.00	3.30	21.0	23.0
ACKSTW0402S-0.4uH/M	0.4±20%	4.00	4.60	14.0	20.1
ACKSTW0402S-0.47uH/M	0.47±20%	4.80	5.80	15.0	17.0
ACKSTW0402S-0.6uH/M	0.6±20%	6.80	7.50	13.0	14.1
ACKSTW0402S-1uH/M	1±20%	10.00	11.00	9.7	10.5
ACKSTW0402S-1.2uH/M	1.2±20%	11.20	13.50	9.0	9.7
ACKSTW0402S-1.5uH/M	1.5±20%	20.30	23.30	8.0	8.7
ACKSTW0402S-2.2uH/M	2.2±20%	22.50	25.80	8.0	8.0
ACKSTW0402S-3.3uH/M	3.3±20%	34.20	38.30	6.0	5.5
ACKSTW0402S-4.7uH/M	4.7±20%	47.20	54.20	4.8	5.2

ACKSTW0403S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTW0403S-0.3uH/M	0.3±20%	2.50	2.90	19.00	24.00
ACKSTW0403S-0.4uH/M	0.4±20%	2.80	3.20	15.80	22.50
ACKSTW0403S-0.47uH/M	0.47±20%	3.40	3.90	14.20	21.20
ACKSTW0403S-0.62uH/M	0.62±20%	4.10	4.60	20.00	15.00
ACKSTW0403S-1uH/M	1±20%	8.00	9.00	12.00	11.00
ACKSTW0403S-1.5uH/M	1.5±20%	14.00	15.40	10.00	8.60
ACKSTW0403S-2.2uH/M	2.2±20%	20.10	22.10	8.00	7.80
ACKSTW0403S-3.3uH/M	3.3±20%	25.00	27.50	7.00	6.60
ACKSTW0403S-4.7uH/M	4.7±20%	36.00	39.60	6.00	5.30

ACKSTW0502S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTW0502S-0.1uH/N	0.1±30%	1.15	1.30	40.0	33.0
ACKSTW0502S-0.16uH/M	0.16±20%	1.60	1.90	29.0	30.0
ACKSTW0502S-0.22uH/M	0.22±20%	2.20	2.50	28.0	25.0
ACKSTW0502S-0.33uH/M	0.33±20%	2.70	3.20	24.0	24.4
ACKSTW0502S-0.56uH/M	0.56±20%	4.50	5.40	19.0	18.7
ACKSTW0502S-1.2uH/M	1.2±20%	9.40	11.30	12.0	13.0

ACKSTW0503S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTW0503S-2.2uH/M	2.2±20%	12.40	14.00	11.00	9.70
ACKSTW0503S-3.3uH/M	3.3±20%	21.20	23.30	10.00	8.10
ACKSTW0503S-4.7uH/M	4.7±20%	27.00	31.00	8.00	7.10
ACKSTW0503S-6.8uH/M	6.8±20%	40.90	47.00	7.00	6.30

ACKSTW0603S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTWH0603S-0.15uH/M	0.15±20%	1.00	1.20	50.00	35.00
ACKSTWH0603S-0.22uH/M	0.22±20%	1.20	1.50	40.00	32.00
ACKSTWH0603S-0.33uH/M	0.33±20%	1.70	2.00	30.00	29.00
ACKSTW0603S-0.47uH/M	0.47±20%	2.20	2.70	35.00	25.00
ACKSTWH0603S-0.56uH/M	0.56±20%	2.80	3.30	30.00	23.30
ACKSTW0603S-0.68uH/M	0.68±20%	2.80	3.40	24.00	23.00
ACKSTWH0603S-0.82uH/M	0.82±20%	3.40	4.00	22.00	21.00
ACKSTW0603S-1uH/M	1±20%	4.20	4.90	23.00	18.10
ACKSTW0603S-1.2uH/M	1.2±20%	5.20	5.80	22.00	16.50
ACKSTWH0603S-1.2uH/M	1.2±20%	4.50	5.20	17.30	17.00
ACKSTW0603S-1.5uH/M	1.5±20%	6.20	7.00	18.00	15.20
ACKSTW0603S-1.8uH/M	1.8±20%	7.00	8.00	16.00	14.00
ACKSTW0603S-2.2uH/M	2.2±20%	8.70	10.30	15.00	12.00
ACKSTW0603S-3.3uH/M	3.3±20%	13.10	15.40	11.00	10.50
ACKSTW0603S-4.7uH/M	4.7±20%	17.50	21.00	11.00	10.00
ACKSTW0603S-5.6uH/M	5.6±20%	20.50	24.10	9.40	8.80
ACKSTW0603S-6.8uH/M	6.8±20%	25.10	28.00	8.40	8.50
ACKSTW0603S-8.2uH/M	8.2±20%	34.00	38.00	8.00	7.50
ACKSTW0603S-10uH/M	10±20%	38.00	44.00	7.20	7.00
ACKSTW0603S-12uH/M	12±20%	46.00	53.00	6.50	6.00
ACKSTW0603S-15uH/M	15±20%	62.10	72.00	6.00	5.20
ACKSTW0603S-18uH/M	18±20%	67.00	77.00	5.00	4.80

ACKSTWH0606S Series

SPECIFICATION TABLE:

Part No.	Inductance (μ H)	DCR ($m\Omega$) @25 $^{\circ}$ C		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTWH0606S-0.22 μ H/M	0.22 $\pm$ 20%	1.10	1.30	65.00	29.00
ACKSTWH0606S-0.47 μ H/M	0.47 $\pm$ 20%	1.50	1.80	38.00	26.00
ACKSTWH0606S-0.68 μ H/M	0.68 $\pm$ 20%	1.80	2.10	28.50	24.00
ACKSTWH0606S-1 μ H/M	1 $\pm$ 20%	2.20	2.50	23.00	22.00
ACKSTWH0606S-1.2 μ H/M	1.2 $\pm$ 20%	2.70	3.20	24.00	21.50
ACKSTWH0606S-1.5 μ H/M	1.5 $\pm$ 20%	3.30	3.80	22.00	20.20
ACKSTWH0606S-1.8 μ H/M	1.8 $\pm$ 20%	3.50	4.00	20.00	20.00
ACKSTWH0606S-2.2 μ H/M	2.2 $\pm$ 20%	3.90	4.50	17.00	17.20
ACKSTWH0606S-3.3 μ H/M	3.3 $\pm$ 20%	5.90	6.50	14.00	16.60
ACKSTWH0606S-4.7 μ H/M	4.7 $\pm$ 20%	9.10	10.10	13.00	13.50
ACKSTWH0606S-5.6 μ H/M	5.6 $\pm$ 20%	12.30	14.00	12.00	11.50
ACKSTWH0606SL-5.6 μ H/M	5.6 $\pm$ 20%	10.60	11.70	11.00	12.60
ACKSTWH0606S-6.8 μ H/M	6.8 $\pm$ 20%	12.50	14.00	9.20	11.50
ACKSTWH0606S-8.2 μ H/M	8.2 $\pm$ 20%	15.20	16.80	8.40	10.10
ACKSTWH0606S-10 μ H/M	10 $\pm$ 20%	17.50	19.40	8.60	9.30
ACKSTWH0606S-12 μ H/M	12 $\pm$ 20%	22.00	24.20	8.00	8.30
ACKSTWH0606S-15 μ H/M	15 $\pm$ 20%	28.20	31.10	6.50	7.40
ACKSTWH0606S-18 μ H/M	18 $\pm$ 20%	33.90	37.30	5.50	6.40
ACKSTWH0606S-22 μ H/M	22 $\pm$ 20%	54.00	59.00	6.00	5.00
ACKSTWH0606SL-22 μ H/M	22 $\pm$ 20%	42.60	46.90	5.10	5.80
ACKSTWH0606S-33 μ H/M	33 $\pm$ 20%	63.10	69.50	4.60	4.90

- ⦿ All test data is reference to 25 $^{\circ}$ C ambient.
- ⦿ Test Condition: 1MHz, 0.1Vrms.
- ⦿ Isat Typ : DC current (A) that will cause L0 to drop approximately 30%.
- ⦿ Irms Typ: DC current (A) that will cause an approximate Δ T of 40 $^{\circ}$ C.
- ⦿ Operat between temperature range -55 $^{\circ}$ C to +150 $^{\circ}$ C(Including self - temperature rise).
- ⦿ Absolute maximum voltage: DC 30V.

ACKSTWH0805S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTWH0805S-3.3uH/M	3.3±20%	6.60	7.90	25.00	16.30
ACKSTWH0805S-22uH/M	22±20%	39.30	47.10	7.00	6.60

ACKSTWH0806S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTWH0806S-4.7uH/M	4.7±20%	8.60	9.90	25.00	14.50
ACKSTWH0806S-10uH/M	10±20%	16.30	18.00	14.00	10.00

ACKSTWH0807S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTWH0807S-4.7uH/M	4.7±20%	7.50	9.00	18.00	16.00

ACKSTWH0808S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTWH0808S-1uH/M	1±20%	2.00	2.30	34.00	35.00
ACKSTWH0808S-2.2uH/M	2.2±20%	3.80	4.40	25.20	22.50
ACKSTWH0808S-4.7uH/M	4.7±20%	7.50	8.70	18.00	16.00
ACKSTWH0808S-6.8uH/M	6.8±20%	9.10	10.90	18.00	13.60
ACKSTWH0808S-10uH/M	10±20%	16.30	18.70	12.00	10.00
ACKSTWH0808S-22uH/M	22±20%	30.40	35.00	7.00	8.00
ACKSTWH0808S-47uH/M	47±20%	64.00	74.00	7.00	5.00

ACKSTW1003S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTW1003S-0.16uH/M	0.16±20%	0.70	0.80	88.00	50.00
ACKSTW1003S-0.33uH/M	0.33±20%	1.22	1.40	68.00	40.00
ACKSTW1003S-0.56uH/M	0.56±20%	2.50	2.75	44.00	32.00
ACKSTW1003S-1uH/M	1±20%	4.00	4.50	35.00	25.00
ACKSTW1003S-2.2uH/M	2.2±20%	5.90	6.50	24.00	15.00

ACKSTW1004S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTW1004S-0.47uH/M	0.47±20%	0.95	1.15	46.00	36.00
ACKSTW1004S-0.68uH/M	0.68±20%	1.30	1.50	39.00	33.00
ACKSTW1004S-1uH/M	1±20%	2.10	2.40	36.00	25.00
ACKSTW1004S-1.5uH/M	1.5±20%	2.80	3.10	26.00	20.00
ACKSTW1004S-2.2uH/M	2.2±20%	4.50	5.00	22.00	15.00
ACKSTW1004S-3.3uH/M	3.3±20%	7.50	8.30	16.20	13.00
ACKSTW1004S-4.7uH/M	4.7±20%	9.50	10.50	15.20	12.00
ACKSTW1004S-5.6uH/M	5.6±20%	13.50	14.90	14.10	11.00
ACKSTW1004S-6.8uH/M	6.8±20%	15.00	16.50	12.00	10.00
ACKSTW1004S-8.2uH/M	8.2±20%	16.70	18.40	11.00	9.50
ACKSTW1004S-10uH/M	10±20%	17.80	19.60	10.00	9.00

ACKSTWH1006S Series

**SPECIFICATION
TABLE:**

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTW1006S-1uH/M	1±20%	1.60	1.90	50.00	30.00
ACKSTWH1006S-1uH/M	1±20%	1.60	1.90	50.00	39.90
ACKSTW1006S-1.2uH/M	1.2±20%	2.00	2.20	49.00	29.00
ACKSTWH1006S-1.2uH/M	1.2±20%	2.00	2.20	49.00	32.00
ACKSTW1006S-1.5uH/M	1.5±20%	2.00	2.20	42.00	29.00
ACKSTWH1006S-1.5uH/M	1.5±20%	2.00	2.20	42.00	32.00
ACKSTW1006S-2.2uH/M	2.2±20%	3.50	4.00	32.00	24.00
ACKSTWH1006S-2.2uH/M	2.2±20%	3.50	4.00	32.00	25.50
ACKSTW1006S-3.3uH/M	3.3±20%	4.90	5.60	26.00	19.00
ACKSTWH1006S-3.3uH/M	3.3±20%	4.90	5.60	26.00	22.00
ACKSTW1006S-4.7uH/M	4.7±20%	6.30	7.30	25.00	17.20
ACKSTWH1006S-4.7uH/M	4.7±20%	6.30	7.30	25.00	19.00
ACKSTWH1006S-5.6uH/M	5.6±20%	6.70	7.70	21.00	17.40
ACKSTW1006S-6.8uH/M	6.8±20%	7.80	9.00	18.00	13.00
ACKSTWH1006S-6.8uH/M	6.8±20%	7.80	9.00	18.40	15.90
ACKSTWH1006S-8.2uH/M	8.2±20%	11.20	12.50	16.90	14.40
ACKSTWH1006S-10uH/M	10±20%	13.00	15.00	16.50	13.00

ACKSTW1007S Series

**SPECIFICATION
TABLE:**

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
CKSTWH1007S-2.2uH/M	2.2±20%	3.20	3.70	36.00	26.00
CKSTWH1007S-3.3uH/M	3.3±20%	4.00	4.50	33.00	25.00
CKSTWH1007S-4.7uH/M	4.7±20%	5.40	6.20	23.00	19.00
CKSTWH1007S-10uH/M	10±20%	13.20	15.00	16.00	12.00

ACKSTWH1008S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTWH1008S-3.3uH/M	3.3±20%	3.20	3.70	34.00	26.00
ACKSTWH1008S-4.7uH/M	4.7±20%	4.00	4.60	28.50	24.70
ACKSTWH1008S-5.6uH/M	5.6±20%	5.20	5.90	24.00	24.00
ACKSTWH1008S-6.8uH/M	6.8±20%	6.20	7.00	22.00	21.20
ACKSTWH1008S-22uH/M	22±20%	23.00	26.50	12.00	11.00

ACKSTWH1010S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum	Typical	Typical
ACKSTWH1010S-0.22uH/M	0.22±20%	0.45	0.50	100.00	55.50
ACKSTWH1010S-0.68uH/M	0.68±20%	0.82	0.91	63.00	48.00
ACKSTWH1010S-1uH/M	1±20%	1.30	1.50	55.00	42.00
ACKSTWH1010SL-1.0uH/M	1.0±20%	1.00	1.10	55.00	43.50
ACKSTWH1010S-1.5uH/M	1.5±20%	1.50	1.70	47.00	40.70
ACKSTWH1010S-2.2uH/M	2.2±20%	2.45	2.70	38.00	33.00
ACKSTWH1010SL-2.2uH/M	2.2±20%	2.10	2.50	38.00	34.00
ACKSTWH1010S-3.3uH/M	3.3±20%	3.10	3.40	34.00	28.00
ACKSTWH1010S-4.7uH/M	4.7±20%	4.10	4.50	27.00	26.00
ACKSTWH1010S-5.6uH/M	5.6±20%	5.20	5.90	24.00	24.00
ACKSTWH1010S-6.8uH/M	6.8±20%	7.10	8.00	23.00	20.00
ACKSTWH1010SL-6.8uH/M	6.8±20%	6.20	7.00	22.00	21.20
ACKSTWH1010S-8.2uH/M	8.2±20%	9.00	10.50	19.00	18.30
ACKSTWH1010SL-8.2uH/M	8.2±20%	7.60	8.70	20.00	18.70
ACKSTWH1010S-10uH/M	10±20%	10.50	12.60	18.00	17.10
ACKSTWH1010SL-10uH/M	10±20%	8.70	9.70	20.00	18.20
ACKSTWH1010S-15uH/M	15±20%	16.00	18.00	15.50	13.80
ACKSTWH1010SL-15uH/M	15±20%	13.60	15.20	18.00	15.40
ACKSTWH1010S-22uH/M	22±20%	19.60	22.00	14.00	13.20
ACKSTWH1010S-33uH/M	33±20%	33.00	40.00	9.00	8.00

ACKSTWH1507S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum		
ACKSTWH1507S-5.3uH/M	5.3±20%	4.20	4.80	34.00	27.00
ACKSTWH1507S-8.2uH/M	8.2±20%	6.70	7.40	26.50	20.00
ACKSTWH1507S-10uH/M	10±20%	8.00	9.00	23.50	16.00

ACKSTWH1508S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum		
ACKSTWH1508S-1.8uH/M	1.8±20%	1.61	1.93	57.00	43.80
ACKSTWH1508S-2.2uH/M	2.2±20%	1.60	1.90	58.00	43.80
ACKSTWH1508S-3uH/M	3±20%	2.20	2.60	50.00	37.60
ACKSTWH1508S-4.5uH/M	4.5±20%	3.44	4.13	37.20	28.20
ACKSTWH1508S-5.3uH/M	5.3±20%	3.80	4.40	41.00	28.00
ACKSTWH1508S-6.1uH/M	6.1±20%	5.40	6.50	40.00	23.10

ACKSTWH1510S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum		
ACKSTWH1510S-4.7uH/M	4.7±20%	2.80	3.20	41.00	32.00
ACKSTWH1510S-6.8uH/M	6.8±20%	3.80	4.30	36.00	27.00
ACKSTWH1510S-8.2uH/M	8.2±20%	4.70	5.60	31.00	25.00
ACKSTWH1510S-10uH/M	10±20%	6.00	7.00	33.00	23.30
ACKSTWH1510S-15uH/M	15±20%	9.00	10.50	30.00	18.00
ACKSTWH1510S-22uH/M	22±20%	12.00	14.00	19.00	15.00
ACKSTWH1510S-33uH/M	33±20%	16.80	18.70	17.90	12.60

ACKSTWH1513S Series

SPECIFICATION TABLE:

Part No.	Inductance (uH)	DCR (mΩ) @25℃		Saturation Current DC Amps. Isat(A)	Heat Rating Current DC Amps. Irms(A)
		Typical	Maximum		
ACKSTWH1513S-15uH/M	15±20%	6.80	7.50	25.50	22.00
ACKSTWH1513S-22uH/M	22±20%	10.90	12.50	22.00	18.00

- ⊙ All test data is reference to 25℃ ambient.
- ⊙ Test Condition: 1MHz, 0.1Vrms.
- ⊙ Isat Typ : DC current (A) that will cause L0 to drop approximately 30%.
- ⊙ Irms Typ: DC current (A) that will cause an approximate ΔT of 40℃.
- ⊙ Operat between temperature range -55℃ to +150℃(Including self - temperature rise).
- ⊙ Absolute maximum voltage: DC 60V.