

KTW-T Series

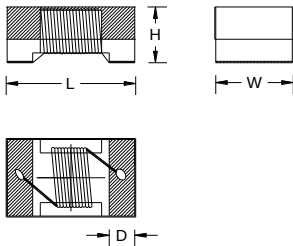
Ferrite Chip Wire Wound Inductors

Product outline

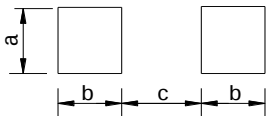
- Ferrite material chip inductors,minature size,suitable for SMT process.
- Terminal electrode structure is used to restrain the parasitic component effect caused by lead.
- Low DC resistance,high current and high inductance value.
- For audio/Video equipment, telecom and Blue Tooth and earphones (KTW-TH,TU,TQ 蓝牙、耳机应用) applications.



Dimensions(mm)



Recommended Patterns



Type	L	W	H	D	a	b	c	Packaging (pcs/reel)
KTW0603TU	1.80 Max	1.25 Max	1.20 Max	0.35	1.02	0.64	0.64	4000
KTW0603TH	1.80 Max	1.25 Max	1.20 Max	0.35	1.02	0.64	0.64	4000
KTW0603TQ	1.80 Max	1.25 Max	1.20 Max	0.35	1.02	0.64	0.64	4000
KTW0805TU	2.40 Max	1.73 Max	1.52Max	0.50	1.78	1.02	0.76	2000
KTW0805TH	2.40 Max	1.73 Max	1.52Max.	0.50	1.78	1.02	0.76	2000
KTW0805TQ	2.40 Max	1.73 Max	1.52Max	0.50	1.78	1.02	0.76	2000

Dimensions without tolerance are typical.

Product Identification

KTW 0603 T U 1R0 □ S C - M

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Wire Wound Inductor Series;
- ② Dimensions: 0603(inch)=1608(mm)=1.6x0.8mm
- ③ **TU**:UV Coating, **TH**:Magnetic Powder Epoxy Half Coating(半封),**TQ**: Magnetic Powder Epoxy Overall Coating(全封).
- ④ Inductance Value: 1R0=1.0uH,100=10uH,101=100uH
- ⑤ Tolerance: K=±10%; M=±20%
- ⑥ Terminal Material: S(Tin)
- ⑦ Packaging type: C=Tape& Reel, B=BULK
- ⑧ M:Colour Marking

KTW-T Series

Ferrite Chip Wire Wound Inductors

KTW0603TU Electrical Characteristics

Tolerance:K $\pm$ 10%, M $\pm$ 20%

Part Number	Inductance uH ①	Q typ.①	Test Freq.	DCR (Ω) MAX.②	Isat-A Typ. ③	Irms-A Typ. ④	SRF-MHz Typ.	Colouring
KTW0603TU-1R0 $\square$ SC-M	1.0	16	7.9MHz	0.41	0.86	0.70	250	N/A
KTW0603TU-1R5 $\square$ SC-M	1.5	16	7.9MHz	0.52	0.70	0.60	160	Brown
KTW0603TU-1R8 $\square$ SC-M	1.8	16	7.9MHz	0.56	0.65	0.58	121	Red
KTW0603TU-2R2 $\square$ SC-M	2.2	16	7.9MHz	0.72	0.60	0.58	103	Orange
KTW0603TU-2R7 $\square$ SC-M	2.7	16	7.9MHz	0.81	0.54	0.50	72	Yellow
KTW0603TU-3R3 $\square$ SC-M	3.3	16	7.9MHz	0.91	0.48	0.50	66	Green
KTW0603TU-3R9 $\square$ SC-M	3.9	16	7.9MHz	1.08	0.45	0.46	61	Blue
KTW0603TU-4R7 $\square$ SC-M	4.7	16	7.9MHz	0.97	0.40	0.42	51	Violet
KTW0603TU-5R6 $\square$ SC-M	5.6	16	7.9MHz	1.43	0.36	0.38	47	Gray
KTW0603TU-6R8 $\square$ SC-M	6.8	16	7.9MHz	1.95	0.33	0.34	43	White
KTW0603TU-8R2 $\square$ SC-M	8.2	16	7.9MHz	2.18	0.30	0.30	40	\
KTW0603TU-100 $\square$ SC-M	10	14	2.5MHz	2.40	0.28	0.28	36	Brown
KTW0603TU-120 $\square$ SC-M	12	14	2.5MHz	2.96	0.26	0.26	32	Red
KTW0603TU-150 $\square$ SC-M	15	14	2.5MHz	3.38	0.24	0.22	29	Orange
KTW0603TU-180 $\square$ SC-M	18	14	2.5MHz	3.75	0.22	0.22	28	Yellow
KTW0603TU-220 $\square$ SC-M	22	14	2.5MHz	4.69	0.20	0.20	24	Green
KTW0603TU-270 $\square$ SC-M	27	14	2.5MHz	6.76	0.18	0.14	20	Blue
KTW0603TU-330 $\square$ SC-M	33	14	2.5MHz	8.58	0.16	0.12	15	Violet
KTW0603TU-470 $\square$ SC-M	47	14	2.5MHz	12.0	0.13	0.10	5	\

KTW0603TH Electrical Characteristics

Part Number	Inductance uH ①	Q typ.①	Test Freq.	DCR $\pm$ 30%(Ω)②	Isat-A Typ. ③	Irms-A Typ. ④	SRF-MHz Typ.
KTW0603TH-1R0MSC	1.0	10	1MHz	0.14	0.8	0.9	350
KTW0603TH-2R2MSC	2.2	10	1MHz	0.30	0.58	0.6	90
KTW0603TH-4R7MSC	4.7	10	1MHz	0.45	0.45	0.5	57
KTW0603TH-6R8MSC	6.8	9	1MHz	0.65	0.41	0.5	25
KTW0603TH-100MSC	10	9	1MHz	1.0	0.27	0.38	25
KTW0603TH-150MSC	15	9	1MHz	1.40	0.22	0.35	25
KTW0603TH-220MSC	22	9	1MHz	2.45	0.18	0.27	20

KTW0603TQ Electrical Characteristics

Part Number	Inductance uH ①	Q typ.①	Test Freq.	DCR (Ω) $\pm$ 30%.②	Isat-A Typ. ③	Irms-A Typ. ④	SRF-MHz Typ.
KTW0603TQ-1R0MSC	1.0	10	1MHz	0.20	1.1	0.72	350
KTW0603TQ-1R5MSC	1.5	10	1MHz	0.38	0.65	0.52	300
KTW0603TQ-2R2MSC	2.2	10	1MHz	0.45	0.68	0.48	250
KTW0603TQ-4R7MSC	4.7	10	1MHz	0.70	0.45	0.4	100
KTW0603TQ-6R8MSC	6.8	9	1MHz	1.25	0.36	0.3	50
KTW0603TQ-100MSC	10	9	1MHz	1.5	0.27	0.38	25
KTW0603TQ-150MSC	15	9	1MHz	2.0	0.27	0.23	25
KTW0603TQ-220MSC	22	9	1MHz	3.9	0.22	0.16	10

All specifications are subject to change without notice.

KTW-T Series

Ferrite Chip Wire Wound Inductors

KTW0805TU Electrical Characteristics

Tolerance: K $\pm 10\%$, M $\pm 20\%$

Part Number⑤	Inductance uH ①	Q typ.①	Test Freq.	DCR (Ω) MAX.②	Irms-A Typ. ④	SRF-MHz Typ.	Color
KTW0805TU-R68□SC-M	0.68	14	7.9 MHz	0.19	1.20	765	Gray
KTW0805TU-1R0□SC-M	1.0	14	7.9 MHz	0.17	1.10	208	/
KTW0805TU-1R2□SC-M	1.2	14	7.9 MHz	0.17	0.96	208	Red
KTW0805TU-1R5□SC-M	1.5	14	7.9 MHz	0.22	0.88	130	Brown
KTW0805TU-1R8□SC-M	1.8	14	7.9 MHz	0.26	0.86	112	Orange
KTW0805TU-2R2□SC-M	2.2	12	7.9 MHz	0.31	0.74	80	Red
KTW0805TU-3R3□SC-M	3.3	12	7.9 MHz	0.36	0.62	50	Orange
KTW0805TU-4R7□SC-M	4.7	14	7.9 MHz	0.56	0.52	51	Yellow
KTW0805TU-5R6□SC-M	5.6	12	7.9 MHz	0.65	0.48	42	Blue
KTW0805TU-6R8□SC-M	6.8	14	7.9 MHz	0.88	0.42	35	Green
KTW0805TU-8R2□SC-M	8.2	13	7.9 MHz	0.94	0.40	33	Purple
KTW0805TU-100□SC-M	10	14	2.5 MHz	1.17	0.30	25	Blue
KTW0805TU-120□SC-M	12	14	2.5 MHz	1.50	0.29	30	Gray
KTW0805TU-150□SC-M	15	15	2.5 MHz	1.82	0.28	28	Purple
KTW0805TU-180□SC-M	18	15	2.5 MHz	2.01	0.26	27	White
KTW0805TU-220□SC-M	22	15	2.5 MHz	2.29	0.24	20	Gray
KTW0805TU-470□SC-M	47	14	2.5 MHz	4.42	0.16	15	/
KTW0805TU-560□SC-M	56	14	2.5 MHz	5.75	0.15	10	Yellow
KTW0805TU-680□SC-M	68	14	2.5 MHz	5.79	0.14	10	Brown
KTW0805TU-820□SC-M	82	14	2.5 MHz	9.75	0.10	10	Orange
KTW0805TU-101□SC-M	100	10	1.0 MHz	9.75	0.10	9	Red

KTW0805TH Electrical Characteristics

Part Number⑤	Inductance uH ①	Q typ.①	Test Freq.	DCR (Ω) $\pm 30\%$ ②	Isat-A Typ. ③	Irms-A Typ. ④	SRF-MHz Typ.
KTW0805TH-1R0MSC	1.0	12	1MHz	0.14	1.1	1.2	250
KTW0805TH-2R2MSC	2.2	12	1MHz	0.18	0.75	0.90	100
KTW0805TH-4R7MSC	4.7	12	1MHz	0.32	0.53	0.55	50
KTW0805TH-8R2MSC	8.2	12	1MHz	0.50	0.43	0.46	35
KTW0805TH-100MSC	10	12	1MHz	0.55	0.42	0.45	35

KTW0805TQ Electrical Characteristics

Part Number⑤	Inductance uH ①	Q typ.①	Test Freq.	DCR (Ω) $\pm 30\%$ ②	Isat-A③ Typ.	Irms-A Typ.④	SRF-MHz Typ.
KTW0805TQ-1R0MSC	1.0	10	1MHz	0.12	1.2	1.0	550
KTW0805TQ-1R5MSC	1.5	10	1MHz	0.13	0.9	0.9	450
KTW0805TQ-2R2MSC	2.2	10	1MHz	0.18	0.78	0.75	400
KTW0805TQ-4R7MSC	4.7	10	1MHz	0.33	0.51	0.47	150
KTW0805TQ-6R8MSC	6.8	10	1MHz	0.35	0.47	0.45	50
KTW0805TQ-100MSC	10	10	1MHz	0.53	0.41	0.45	35
KTW0805TQ-150MSC	15	10	1MHz	0.65	0.27	0.35	25
KTW0805TQ-220MSC	22	9	1MHz	0.95	0.27	0.3	10

① Inductance L and Q tested using an E4991A or equivalent.

② DCR measured on a micro-ohmmeter.

③ Isat: The DC current at which the inductance decreases by 30% from the initial value..

④ Irms: The DC current at which the temperature rise $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

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