

SMD Wire Wound Chip Inductor(KWTC Series) 贴片 (高频) 绕线电感KWTC系列

特性及应用

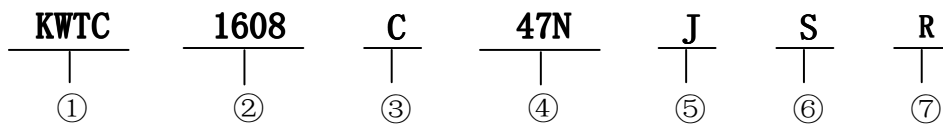
- 使用载带包装运用于SMT.
- 小尺寸, 可表面贴装.
- 高Q值, 高自谐频率.
- 高精度, 高可靠性.
- 适用于回流焊SMT工艺.
- 无铅产品, 符合ROHS指令.
- 陶瓷体高频绕线电感, 用于通讯设备的高频线路.
- 广泛用于数字照相机, 硬盘驱动器, 液晶显示器, 汽车电子, 手机, 无线电话和高频通信等小型化电器设备.

FEATURES/APPLICATIONS

- Carrier tape packing use for SMT.
- Small chip suitable for surface mounting.
- High Q value and high self-resonant frequency.
- High inductance tolerance and stable inductance at high frequency.
- Suitable for reflow SMT craft soldering
- Lead free products, ROHS compliant
- Use in high frequency circuit of telecommunication, equipment for high frequency ceramic wire wound inductors.
- Digital cameras/Hard-Disk drivers/LCD Monitor/Telecommunications/Car audio equipment and other small-sized general electronic appliances for ferrite wire wound inductors.

产品标示

PRODUCT INDICATION

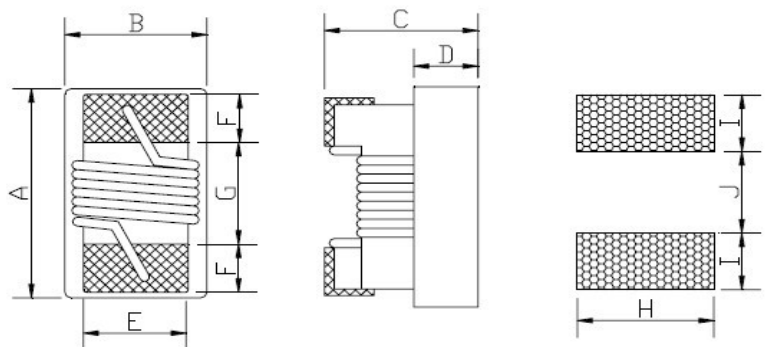
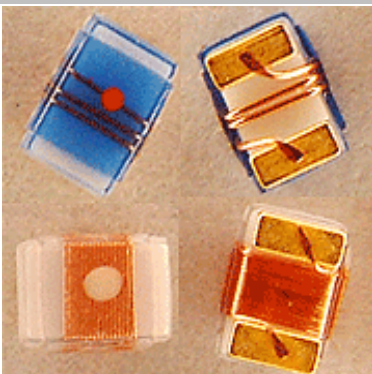


- ① 系列名称: KWTC.
- ② 外形尺寸: 16表示长1.6mm, 08表示宽0.8mm.
- ③ 材料代号: C表示陶瓷体; F表示铁氧体.
- ④ 电气特性表示: 47N表示47nH.
- ⑤ 允许公差: J表示±5%; K表示±10%.
- ⑥ 电极材质: G标示金端头; S表示锡端头.
- ⑦ 包装方式: R表示载带包装; B表示散装.

- ① Series name: KWTC.
- ② External dimensions: 16 for Length 1.6mm, 08 for Width 0.8mm.
- ③ Material code: C for ceramic; F for Ferrite.
- ④ Electrical code: 47N for 47nH.
- ⑤ Tolerance: J for ±5%, K for ±10%
- ⑥ Termination materials: G: Gold; S: Sn
- ⑦ Packing style: R for carrier tape reel; B for in bulk

外形尺寸 (单位:mm)

SHAPE AND DIMENSIONS (unit:mm)



型号 TYRE	A (Max)	B (Max)	H (Max)	D	E	F	G	N	J
KWTC1005 (0402)	1.00	0.68	0.55	0.20	0.20	0.60	0.80	0.40	0.54
KWTC1608 (0603)	1.60	1.00	0.97	0.38	0.33	0.86	1.50	0.60	0.64
KWTC2012 (0805)	2.20	1.45	1.45	0.51	0.50	1.03	1.78	1.02	0.76
KWTC2520 (1008)	2.60	2.50	2.12	0.80	0.50	1.43	2.80	1.02	1.27
KWTC3216 (1206)	3.56	2.16	1.52	0.60	0.51	2.03	2.50	1.02	1.78

SMD Wire Wound Chip Inductor(KWTC Series) 贴片 (高频) 绕线电感KWTC系列

电气性能 Electrical Characteristics TYPE:KWTC1005C(0402)

Part NO. 产品编号	Inductance 电感 (nH)	Test freq 测试频率 (MHz)	Tolerance 公差 (%)	Q(Min) 品质因数	SRF (MHz) 自谐频率 (Min)	DC Resistance 直流电阻 (Ω)Max	Rated Current 额定电流 (mA)Max
KWTC1005C-1N0	1.0	250	$\pm 10\%$	13.0	6000.0	0.0390	1000.0000
KWTC1005C-2N2	2.2	250	$\pm 10\%$	16.0	6000.0	0.0730	800.0000
KWTC1005C-2N4	2.4	250	$\pm 10\%$	16.0	6000.0	0.0730	840.0000
KWTC1005C-2N7	2.7	250	$\pm 10\%$	16.0	6000.0	0.0730	840.0000
KWTC1005C-3N6	3.6	250	$\pm 10\%$	16.0	6000.0	0.0920	840.0000
KWTC1005C-3N9	3.9	250	$\pm 10\%$	17.0	5800.0	0.1100	800.0000
KWTC1005C-4N3	4.3	250	$\pm 10\%$	18.0	5800.0	0.1100	800.0000
KWTC1005C-4N7	4.7	250	$\pm 10\%$	20.0	5800.0	0.1100	800.0000
KWTC1005C-5N1	5.1	250	$\pm 10\%$	21.0	5800.0	0.1100	800.0000
KWTC1005C-6N8	6.8	250	$\pm 10\%$	23.0	4400.0	0.1420	680.0000
KWTC1005C-7N5	7.5	150	$\pm 10\%$	24.0	4400.0	0.1420	680.0000
KWTC1005C-8N2	8.2	150	$\pm 10\%$	24.0	4400.0	0.1420	680.0000
KWTC1005C-9N1	9.1	150	$\pm 10\%$	24.0	4400.0	0.1420	680.0000
KWTC1005C-10N	10.0	150	$\pm 5\%$	25.0	3700.0	0.1770	600.0000
KWTC1005C-11N	11.0	150	$\pm 5\%$	25.0	3700.0	0.1770	600.0000
KWTC1005C-12N	12.0	150	$\pm 5\%$	25.0	3600.0	0.1770	600.0000
KWTC1005C-13N	13.0	150	$\pm 5\%$	26.0	3600.0	0.1770	560.0000
KWTC1005C-15N	15.0	150	$\pm 5\%$	26.0	3200.0	0.2080	560.0000
KWTC1005C-16N	16.0	150	$\pm 5\%$	26.0	3200.0	0.2080	480.0000
KWTC1005C-18N	18.0	150	$\pm 5\%$	26.0	3000.0	0.2450	480.0000
KWTC1005C-20N	20.0	150	$\pm 5\%$	26.0	3000.0	0.2450	375.0000
KWTC1005C-22N	22.0	150	$\pm 5\%$	26.0	2700.0	0.3620	375.0000
KWTC1005C-24N	24.0	150	$\pm 5\%$	26.0	2700.0	0.3620	375.0000
KWTC1005C-27N	27.0	150	$\pm 5\%$	26.0	2500.0	0.3620	320.0000
KWTC1005C-30N	30.0	150	$\pm 5\%$	26.0	2200.0	0.4080	320.0000
KWTC1005C-33N	33.0	150	$\pm 5\%$	26.0	2200.0	0.4080	310.0000
KWTC1005C-36N	36.0	150	$\pm 5\%$	26.0	2200.0	0.4580	310.0000
KWTC1005C-39N	39.0	150	$\pm 5\%$	26.0	2200.0	0.4580	300.0000
KWTC1005C-43N	43.0	150	$\pm 5\%$	26.0	2100.0	0.5020	260.0000
KWTC1005C-47N	47.0	150	$\pm 5\%$	26.0	2000.0	0.5460	260.0000
KWTC1005C-51N	51.0	150	$\pm 5\%$	26.0	2000.0	0.5460	200.0000
KWTC1005C-56N	56.0	150	$\pm 5\%$	26.0	1900.0	0.7610	190.0000
KWTC1005C-68N	68.0	150	$\pm 5\%$	26.0	1800.0	1.1600	180.0000
KWTC1005C-82N	82.0	150	$\pm 5\%$	26.0	1700.0	1.3300	160.0000
KWTC1005C-R10N	100.0	150	$\pm 5\%$	26.0	1300.0	1.8700	140.0000
KWTC1005C-R12N	120.0	150	$\pm 5\%$	26.0	1200.0	2.3500	140.0000

※ 超出以上规格的特殊要求也可满足。Special inquiries besides the above common used types can be meet.

SMD Wire Wound Chip Inductor(KWTC Series) 贴片 (高频) 绕线电感KWTC系列

电气性能 Electrical Characteristics TYPE:KWTC1608C(0603)

Part NO. 产品编号	Inductance 电感 (nH)	Test freq 测试频率 (MHz)	Tolerance 公差 (%)	Q(Min) 品质因数	SRF (MHz) 自谐频率 (Min)	DC Resistance 直流电阻 (Ω)Max	Rated Current 额定电流 (mA)Max
KWTC1608C-1N8	1.8	250	$\pm 5\%$	16.0	6000.0	0.0450	700.0000
KWTC1608C-3N9	3.9	250	$\pm 5\%$	20.0	6000.0	0.0800	700.0000
KWTC1608C-6N8	6.8	250	$\pm 5\%$	25.0	5800.0	0.1100	700.0000
KWTC1608C-10N	10.0	250	$\pm 5\%$	30.0	4800.0	0.1300	700.0000
KWTC1608C-12N	12.0	250	$\pm 5\%$	30.0	4000.0	0.1300	700.0000
KWTC1608C-15N	15.0	250	$\pm 5\%$	30.0	4000.0	0.1700	700.0000
KWTC1608C-18N	18.0	250	$\pm 5\%$	30.0	3000.0	0.1700	700.0000
KWTC1608C-22N	22.0	250	$\pm 5\%$	35.0	2800.0	0.1900	700.0000
KWTC1608C-27N	27.0	250	$\pm 5\%$	35.0	2300.0	0.2200	600.0000
KWTC1608C-33N	33.0	250	$\pm 5\%$	35.0	2200.0	0.2200	600.0000
KWTC1608C-39N	39.0	250	$\pm 5\%$	35.0	2100.0	0.2500	600.0000
KWTC1608C-47N	47.0	250	$\pm 5\%$	35.0	2000.0	0.2800	600.0000
KWTC1608C-56N	56.0	250	$\pm 5\%$	35.0	1850.0	0.3100	600.0000
KWTC1608C-68N	68.0	250	$\pm 5\%$	35.0	1700.0	0.3400	400.0000
KWTC1608C-72N	72.0	150	$\pm 5\%$	35.0	1700.0	0.4900	400.0000
KWTC1608C-82N	82.0	150	$\pm 5\%$	35.0	1500.0	0.5400	400.0000
KWTC1608C-R10	100.0	150	$\pm 5\%$	35.0	1500.0	0.7100	400.0000
KWTC1608C-R12	120.0	150	$\pm 5\%$	35.0	1400.0	0.7900	300.0000
KWTC1608C-R15	150.0	150	$\pm 5\%$	35.0	1350.0	0.9200	280.0000
KWTC1608C-R18	180.0	150	$\pm 5\%$	35.0	1200.0	1.2500	240.0000
KWTC1608C-R22	220.0	150	$\pm 5\%$	35.0	1100.0	1.5000	200.0000
KWTC1608C-R27	270.0	100	$\pm 5\%$	24.0	900.0	2.3000	170.0000
KWTC1608C-R33	330.0	100	$\pm 5\%$	25.0	900.0	3.8900	100.0000
KWTC1608C-R39	390.0	100	$\pm 5\%$	25.0	900.0	4.3500	100.0000
KWTC1608C-R47	470.0	100	$\pm 5\%$	25.0	600.0	3.6000	80.0000

※ 超出以上规格的特殊要求也可满足。Special inquiries besides the above common used types can be meet.

SMD Wire Wound Chip Inductor(KWTC Series) 贴片 (高频) 绕线电感KWTC系列

电气性能 Electrical Characteristics TYPE:KWTC2012C(0805)

Part NO. 产品编号	Inductance 电感 (nH)	Test freq 测试频率 (MHz)	Tolerance 公差 (%)	Q(Min) 品质因数	SRF (MHz) 自谐频率 (Min)	DC Resistance 直流电阻 (Ω)Max	Rated Current 额定电流 (mA)Max
KWTC2012C-3N3	3.3	250	±5%	50.0	1500.0	0.0800	600.0000
KWTC2012C-5N6	5.6	250	±5%	65.0	100.0	0.0800	600.0000
KWTC2012C-6N8	6.8	250	±5%	50.0	100.0	0.1100	600.0000
KWTC2012C-8N2	8.2	250	±5%	50.0	100.0	0.1200	600.0000
KWTC2012C-10N	10.0	250	±5%	60.0	500.0	0.1000	600.0000
KWTC2012C-12N	12.0	250	±5%	50.0	500.0	0.1500	600.0000
KWTC2012C-15N	15.0	250	±5%	50.0	500.0	0.1700	600.0000
KWTC2012C-18N	18.0	250	±5%	50.0	500.0	0.2000	600.0000
KWTC2012C-22N	22.0	250	±5%	55.0	500.0	0.2200	500.0000
KWTC2012C-27N	27.0	250	±5%	55.0	500.0	0.2500	500.0000
KWTC2012C-33N	33.0	250	±5%	60.0	500.0	0.2700	500.0000
KWTC2012C-39N	39.0	250	±5%	60.0	500.0	0.2900	500.0000
KWTC2012C-47N	47.0	250	±5%	60.0	500.0	0.3100	500.0000
KWTC2012C-56N	56.0	250	±5%	60.0	500.0	0.3400	500.0000
KWTC2012C-68N	68.0	150	±5%	60.0	500.0	0.3800	500.0000
KWTC2012C-82N	82.0	150	±5%	65.0	500.0	0.4200	400.0000
KWTC2012C-R10	100.0	150	±5%	65.0	500.0	0.4600	400.0000
KWTC2012C-R12	120.0	150	±5%	50.0	250.0	0.5100	400.0000
KWTC2012C-R15	150.0	150	±5%	50.0	250.0	0.5600	400.0000
KWTC2012C-R18	180.0	150	±5%	50.0	250.0	0.6400	400.0000
KWTC2012C-R22	220.0	150	±5%	50.0	250.0	0.7000	400.0000
KWTC2012C-R27	270.0	100	±5%	48.0	250.0	1.0000	350.0000
KWTC2012C-R33	330.0	100	±5%	35.0	250.0	1.4000	310.0000
KWTC2012C-R39	390.0	100	±5%	35.0	580.0	1.5000	290.0000
KWTC2012C-R47	470.0	100	±5%	35.0	530.0	1.7600	250.0000
KWTC2012C-R56	560.0	100	±5%	35.0	520.0	1.9000	230.0000
KWTC2012C-R68	680.0	100	±5%	34.0	400.0	2.2000	190.0000
KWTC2012C-R82	820.0	100	±5%	34.0	370.0	2.3500	180.0000
KWTC2012C-R91	910.0	100	±5%	33.0	350.0	0.9800	240.0000
KWTC2012C-1R0	1000.0	100	±5%	26.0	320.0	1.0800	250.0000
KWTC2012C-1R2	1200.0	100	±5%	26.0	270.0	1.1300	220.0000
KWTC2012C-1R5	1500.0	100	±5%	25.0	200.0	1.7300	200.0000
KWTC2012C-1R8	1800.0	100	±5%	23.0	150.0	2.4000	180.0000
KWTC2012C-2R2	2200.0	100	±5%	22.0	140.0	2.6500	130.0000
KWTC2012C-2R7	2700.0	100	±5%	10.0	200.0	2.7500	120.0000
KWTC2012C-3R3	3300.0	100	±5%	10.0	220.0	2.9500	100.0000

※ 超出以上规格的特殊要求也可满足。Special inquiries besides the above common used types can be meet.

SMD Wire Wound Chip Inductor(KWTC Series) 贴片 (高频) 绕线电感KWTC系列

电气性能 Electrical Characteristics TYPE:KWTC2520C(1008)

Part NO. 产品编号	Inductance 电感(nH)	Test freq 测试频率(MHz)	Tolerance 公差(%)	Q(Min) 品质因数	SRF(MHz) 自谐频率(Min)	DC Resistance 直流电阻(Ω)Max	Rated Current 额定电流(mA)Max
KWTC2520C-4N7	4.7	50	±5	60	6000	0.07	1000
KWTC2520C-8N2	8.2	50	±5	60	5000	0.07	1000
KWTC2520C-10N	10	50	±5	60	4100	0.08	1000
KWTC2520C-12N	12	50	±5	55	3400	0.09	1000
KWTC2520C-15N	15	50	±5	65	2600	0.13	1000
KWTC2520C-18N	18	50	±5	55	2600	0.11	1000
KWTC2520C-22N	22	50	±5	60	2400	0.12	1000
KWTC2520C-27N	27	50	±5	60	1700	0.13	1000
KWTC2520C-33N	33	50	±5	60	1700	0.14	1000
KWTC2520C-39N	39	50	±5	70	1600	0.15	1000
KWTC2520C-47N	47	50	±5	70	1600	0.16	1000
KWTC2520C-56N	56	50	±5	70	1400	0.18	1000
KWTC2520C-68N	68	50	±5	70	1200	0.21	1000
KWTC2520C-82N	82	50	±5	65	1000	0.22	1000
KWTC2520C-R10	100	25	±5	65	1000	0.56	650
KWTC2520C-R12	120	25	±5	60	1000	0.63	650
KWTC2520C-R15	150	25	±5	60	850	0.62	580
KWTC2520C-R18	180	25	±5	50	800	0.70	620
KWTC2520C-R22	220	25	±5	50	700	0.80	500
KWTC2520C-R27	270	25	±5	50	700	0.91	500
KWTC2520C-R33	330	25	±5	50	600	1.05	450
KWTC2520C-R39	390	25	±5	50	500	1.12	470
KWTC2520C-R47	470	25	±10	50	500	1.10	470
KWTC2520C-R56	560	25	±10	50	450	1.33	400
KWTC2520C-R68	680	25	±10	50	375	1.47	400
KWTC2520C-R75	750	25	±10	45	360	1.54	360
KWTC2520C-R82	820	25	±10	45	350	1.61	400
KWTC2520C-1R0	1000	25	±10	35	290	1.75	370
KWTC2520C-1R2	1200	7.9	±10	35	250	2.00	350
KWTC2520C-1R5	1500	7.9	±10	28	200	2.30	330
KWTC2520C-1R8	1800	7.9	±10	28	160	2.60	300
KWTC2520C-2R2	2200	7.9	±10	28	160	2.80	280
KWTC2520F-3R3	3300	7.9	±10	25	120	1.65	450
KWTC2520F-3R9	3900	7.9	±10	26	110	1.23	420
KWTC2520F-4R7	4700	7.9	±10	25	100	2.55	400
KWTC2520F-5R6	5600	7.9	±10	18	80	2.65	380
KWTC2520F-6R8	6800	7.9	±10	18	60	2.90	360
KWTC2520F-8R2	8200	7.9	±10	16	40	3.20	330
KWTC2520F-100	10000	7.9	±10	15	60	3.50	300

※ 超出以上规格的特殊要求也可满足。Special inquiries besides the above common used types can be meet.

SMD Wire Wound Chip Inductor(KWTC Series) 贴片（高频）绕线电感KWTC系列

电气性能 Electrical Characteristics TYPE:KWTC3216C(1206)

Part NO. 产品编号	Inductance 电感(nH)	Test freq 测试频率(MHz)	Tolerance 公差(%)	Q(Min) 品质因数	SRF(MHz) 自谐频率(Min)	DC Resistance 直流电阻(Ω)Max	Rated Current 额定电流(mA)Max
KWTC3216C-3N3	3.3	100	±5	30	6000	0.05	1000
KWTC3216C-6N8	6.8	100	±5	30	5500	0.07	1000
KWTC3216C-10N	10	100	±5	40	4000	0.08	1000
KWTC3216C-12N	12	100	±5	40	3200	0.08	1000
KWTC3216C-15N	15	100	±5	40	3200	0.1	1000
KWTC3216C-18N	18	100	±5	50	2800	0.1	1000
KWTC3216C-22N	22	100	±5	50	2200	0.1	1000
KWTC3216C-27N	27	100	±5	50	1800	0.11	1000
KWTC3216C-33N	33	100	±5	55	1800	0.11	1000
KWTC3216C-39N	39	100	±5	55	1800	0.12	1000
KWTC3216C-47N	47	100	±5	55	1500	0.13	1000
KWTC3216C-56N	56	100	±5	55	1450	0.14	1000
KWTC3216C-68N	68	100	±5	55	1200	0.26	1000
KWTC3216C-82N	82	100	±5	55	1200	0.26	1000
KWTC3216C-R10	100	25	±5	55	1100	0.26	900
KWTC3216C-R12	120	25	±5	60	1100	0.26	850
KWTC3216C-R15	150	25	±5	60	950	0.31	800
KWTC3216C-R18	180	25	±5	60	900	0.43	750
KWTC3216C-R22	220	25	±5	60	760	0.50	700
KWTC3216C-R27	270	25	±5	55	730	0.56	670
KWTC3216C-R33	330	25	±5	45	650	0.62	630
KWTC3216C-R39	390	25	±5	45	600	0.75	590
KWTC3216C-R47	470	25	±5	45	550	1.30	530
KWTC3216C-R56	560	25	±5	45	470	1.34	490
KWTC3216C-R68	680	25	±5	45	450	1.58	460
KWTC3216C-R82	820	25	±5	45	420	1.82	430
KWTC3216C-1R0	1000	25	±5	45	400	2.80	320

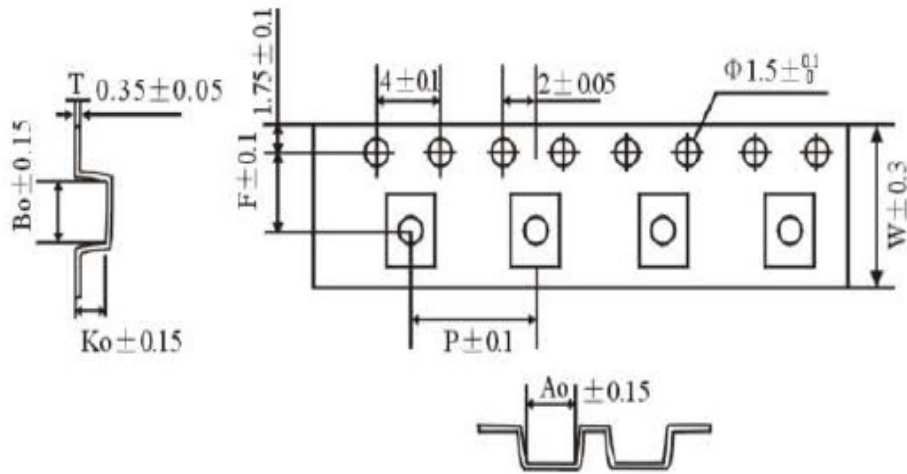
■ 记事 Notes:

- 电感值测试仪：HP4286A/HP4191A或同等LCR Meter。
Inductance instrument: HP4286A/HP4191A or LCR Meter equivalent.
- 电感测试条件：100KHz/1KHz。
Inductance testing condition: 100KHz/1KHz.
- 电阻测试仪：TH2512B或同等的DCR测试设备。
DCR instrument: TH2512B or DCR test equipment equivalent.
- 额定电流测试：VR7210&VR113H。
Rated Current test: VR7210&VR113H.
- 额定电流定义：电感下降25%或温度上升40℃时取其最小值作为额定电流。
Rated Current definition: Inductance drop by 25% or temperature rise by 40℃, the lesser of the minimum as the rated current.
- 贮藏温度：-25℃~80℃；相对湿度：RH65%~85%。
Temperature storage range: -25℃~80℃； the relative humidity: RH65%~85%.

※ 超出以上规格的特殊要求也可满足。Special inquiries besides the above common used types can be meet.

SMD Wire Wound Chip Inductor(KWTC Series) 贴片 (高频) 绕线电感KWTC系列

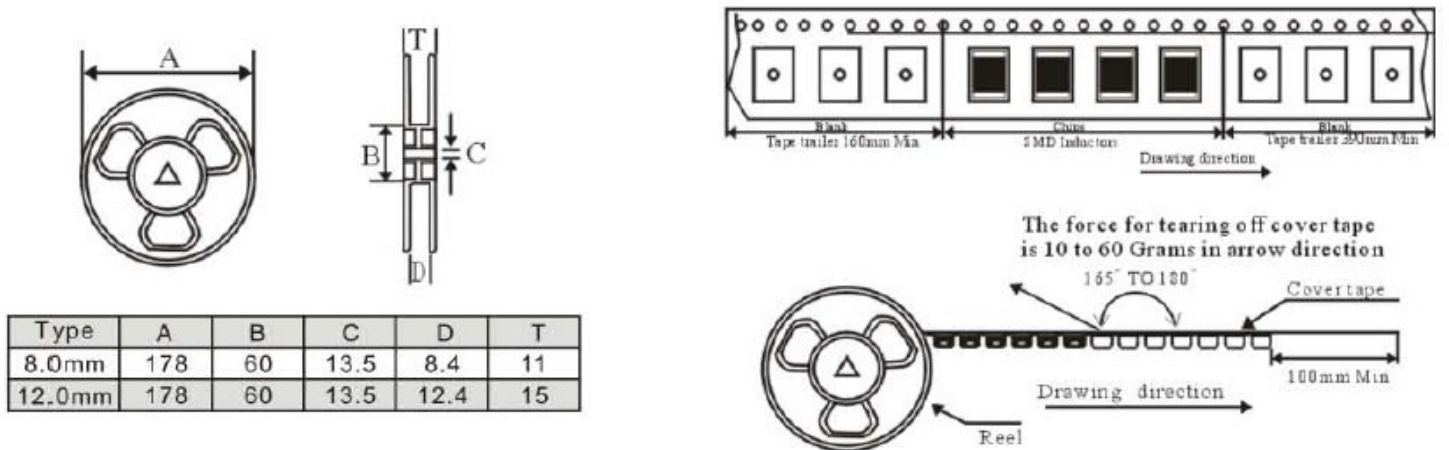
编带尺寸 Dimensions of tape(unit:mm)



型号Type	尺寸Dimensions						带轮Reel	Quantities(数量)
	Ao	Bo	W	P	F	Ko		PCS/reel(每卷)
KWTC1005	0.75	1.10	8.00	4.00	3.50	0.65	178*8.0	10000
KWTC1608	1.10	1.78	8.00	4.00	3.50	1.00	178*8.0	4000
KWTC2012	1.65	2.55	8.00	4.00	3.50	1.55	178*8.0	3000
KWTC2520	2.60	2.67	8.00	4.00	3.50	2.25	178*8.0	2000
KWTC3216	2.20	3.60	8.00	4.00	3.50	1.65	178*8.0	2000

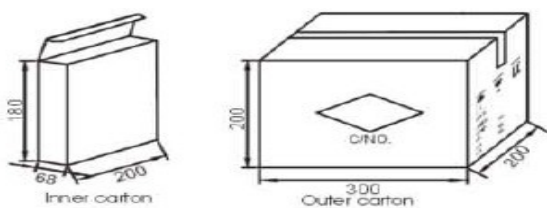
※超出以上规格的特殊要求也可以满足。Special inquiries besides the above common used types can be meet.

带轮尺寸 Dimensions Reel(unit:mm) 编带筒图及拉伸方向 Taping figures and drawing direction



Type	A	B	C	D	T
8.0mm	178	60	13.5	8.4	11
12.0mm	178	60	13.5	12.4	15

包装箱尺寸 Box and case dinen sions(unit:mm) 包装数量 Packaging quantities(unit:mm)



6内箱=1外箱(6 boxes in a case)

型号Type	Quantities(数量)	Quantities(数量)
	Inner carton 内箱	Outer carton 外箱
KWTC1005	5/50000	6/300K
KWTC1608	5/20000	6/120K
KWTC2012	5/15000	6/90K
KWTC2520	5/10000	6/60K
KWTC3216	5/10000	6/60K

※超出以上规格的特殊要求也可满足。Special inquiries besides the above common used types can be meet.