



Chip Inductor ALTI Series

**Automotive
AEC-Q200**

RoHS Compliant
Halogen Free
REACH Compliant



Noise
Suppression

Shield

Multilayer

Ceramic

High
Frequency

Part Numbering

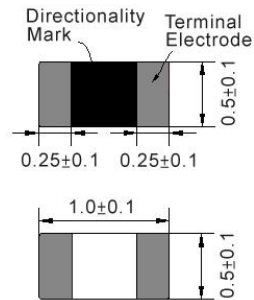
ALTI	100505	1N0	S
Series Name	Dimensions Code (mm)	Inductance (nH)	Tolerance
	100505 1.0x0.5x0.5	1N0 1.0	S ±0.3nH
		10N 10	J ±5%
		R10 100	

This specification applies to Wire Wound Chip Inductors for Automotive Electronics based on AEC-Q200 except for Power train and Safety.



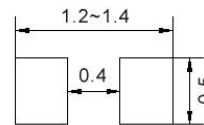
ALTI-100505 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance	L,Q	Q	SRF	RDC	Rated Current	Tolerance
	(nH)	Test Freq.	Min.	(MHz)Min.	(Ω)Max.	(mA)Max.	(±%)
ALTI-100505-1N0□	1.0	100 MHz,200 mV	8	10000	0.07	400	±0.3nH
ALTI-100505-1N1□	1.1	100 MHz,200 mV	8	10000	0.10	400	±0.3nH
ALTI-100505-1N2□	1.2	100 MHz,200 mV	8	10000	0.09	400	±0.3nH
ALTI-100505-1N3□	1.3	100 MHz,200 mV	8	9000	0.10	400	±0.3nH
ALTI-100505-1N5□	1.5	100 MHz,200 mV	8	9000	0.10	400	±0.3nH
ALTI-100505-1N6□	1.6	100 MHz,200 mV	8	8700	0.10	400	±0.3nH
ALTI-100505-1N8□	1.8	100 MHz,200 mV	8	8700	0.10	400	±0.3nH
ALTI-100505-2N0□	2.0	100 MHz,200 mV	8	8100	0.10	400	±0.3nH
ALTI-100505-2N2□	2.2	100 MHz,200 mV	8	8100	0.12	400	±0.3nH
ALTI-100505-2N4□	2.4	100 MHz,200 mV	8	7700	0.15	400	±0.3nH
ALTI-100505-2N7□	2.7	100 MHz,200 mV	8	7700	0.15	400	±0.3nH
ALTI-100505-3N0□	3.0	100 MHz,200 mV	8	6300	0.15	400	±0.3nH
ALTI-100505-3N3□	3.3	100 MHz,200 mV	8	6300	0.15	400	±0.3nH
ALTI-100505-3N6□	3.6	100 MHz,200 mV	8	6100	0.15	400	±0.3nH
ALTI-100505-3N9□	3.9	100 MHz,200 mV	8	6100	0.18	400	±0.3nH
ALTI-100505-4N3□	4.3	100 MHz,200 mV	8	6000	0.18	400	±0.3nH
ALTI-100505-4N7□	4.7	100 MHz,200 mV	8	6000	0.18	400	±0.3nH
ALTI-100505-5N1□	5.1	100 MHz,200 mV	8	5300	0.20	400	±0.3nH
ALTI-100505-5N6□	5.6	100 MHz,200 mV	8	5100	0.20	400	±0.3nH
ALTI-100505-6N2□	6.2	100 MHz,200 mV	8	4500	0.22	400	±0.3nH
ALTI-100505-6N8□	6.8	100 MHz,200 mV	8	4550	0.24	400	5
ALTI-100505-7N5□	7.5	100 MHz,200 mV	8	4200	0.24	300	5
ALTI-100505-8N2□	8.2	100 MHz,200 mV	8	4100	0.24	300	5
ALTI-100505-9N1□	9.1	100 MHz,200 mV	8	3900	0.26	300	5
ALTI-100505-10N□	10	100 MHz,200 mV	8	3900	0.26	300	5
ALTI-100505-12N□	12	100 MHz,200 mV	8	3000	0.28	300	5
ALTI-100505-15N□	15	100 MHz,200 mV	8	2500	0.32	300	5
ALTI-100505-18N□	18	100 MHz,200 mV	8	2200	0.36	300	5
ALTI-100505-22N□	22	100 MHz,200 mV	8	1900	0.42	300	5
ALTI-100505-27N□	27	100 MHz,200 mV	8	1700	0.46	300	5

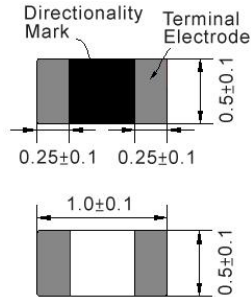
Note: When ordering, please specify tolerance code. Tolerance: S=±0.3nH / J=±5%

1. Operating temperature range - 40°C ~ 125°C
2. Applied the current to coils, the temperature rise shall not be more than 30°C
3. Residual impedance of short chip : 0nH
4. Measure Equipment:
L & Q: Agilent E4991A+Agilent 16197A
SRF: Agilent E4991A or HP19196C
RDC: HP4338B or CHEN HWA 502



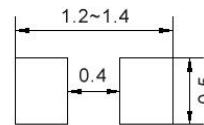
ALTI-100505 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance	L,Q	Q	SRF	RDC	Rated Current	Tolerance
	(nH)	Test Freq.	Min.	(MHz)Min.	(Ω)Max.	(mA)Max.	(±%)
ALTI-100505-33N□	33	100 MHz,200 mV	8	1600	0.58	200	5
ALTI-100505-39N□	39	100 MHz,200 mV	8	1200	0.65	200	5
ALTI-100505-47N□	47	100 MHz,200 mV	8	1000	0.72	200	5
ALTI-100505-56N□	56	100 MHz,200 mV	8	800	0.82	200	5
ALTI-100505-68N□	68	100 MHz,200 mV	8	800	0.92	180	5
ALTI-100505-82N□	82	100 MHz,200 mV	8	700	1.20	150	5
ALTI-100505-R10□	100	100 MHz,200 mV	8	900	2.00	100	5
ALTI-100505-R12□	120	100 MHz,200 mV	8	800	2.20	100	5
ALTI-100505-R15□	150	100 MHz,200 mV	8	700	3.50	100	5
ALTI-100505-R18□	180	100 MHz,200 mV	8	600	3.80	100	5
ALTI-100505-R22□	220	100 MHz,200 mV	8	500	4.20	100	5
ALTI-100505-R27□	270	100 MHz,200 mV	8	500	4.80	100	5

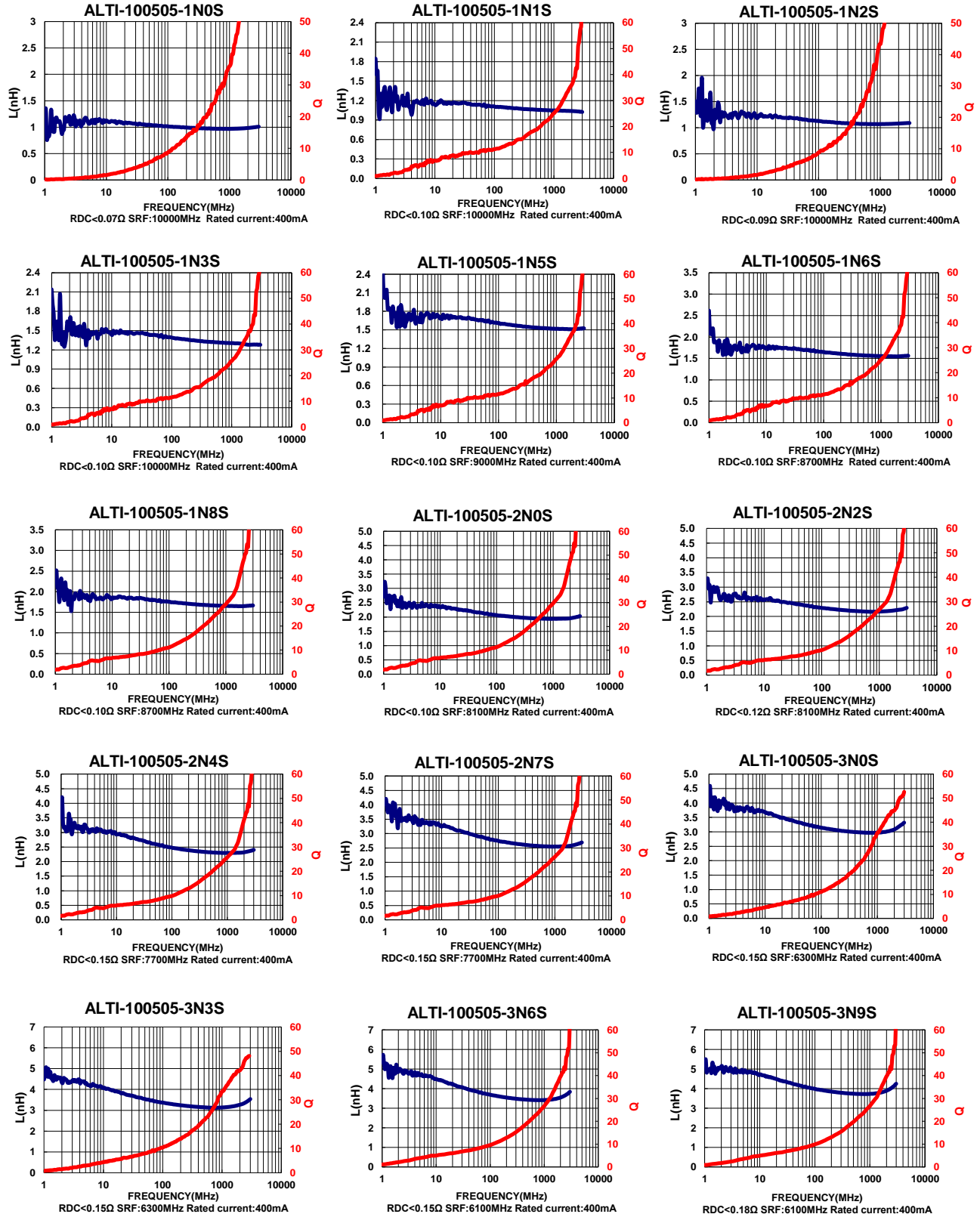
Note: When ordering, please specify tolerance code. Tolerance: S=±0.3nH / J=±5%

1. Operating temperature range - 40°C ~ 125°C
2. Applied the current to coils, the temperature rise shall not be more than 30°C
3. Residual impedance of short chip : 0nH
4. Measure Equipment:
L & Q: Agilent E4991A+Agilent 16197A
SRF: Agilent E4991A or HP19196C
RDC: HP4338B or CHEN HWA 502



ALTI-100505 Type

Characteristics Graph

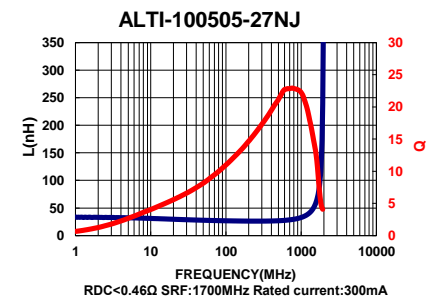
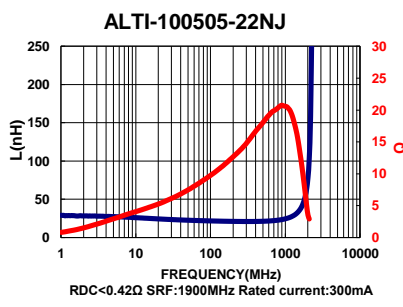
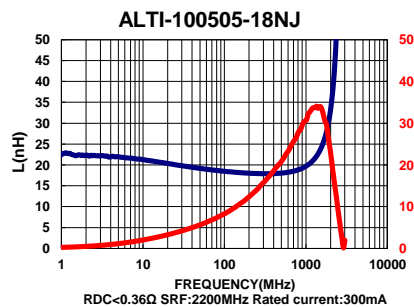
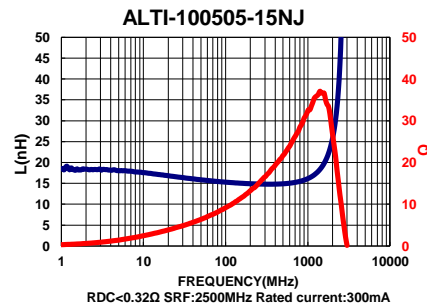
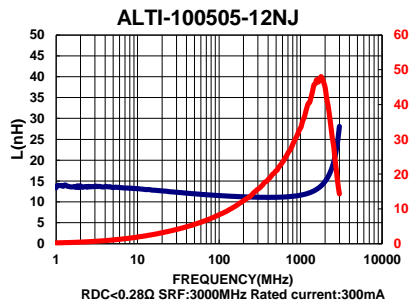
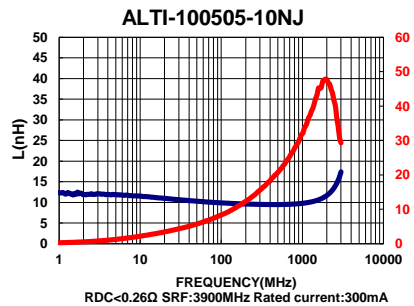
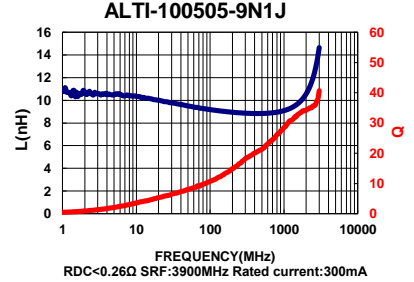
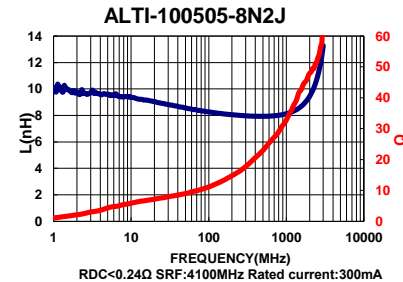
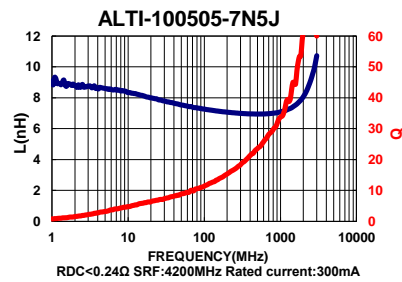
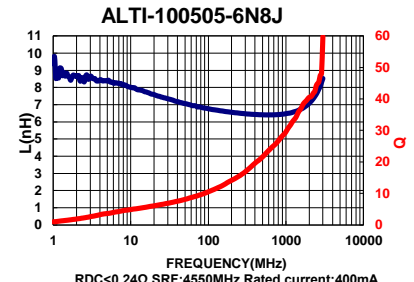
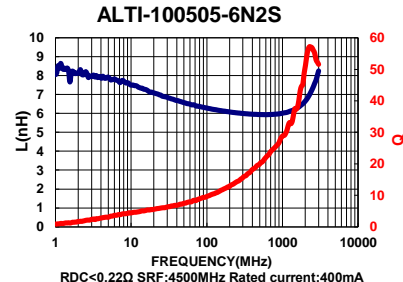
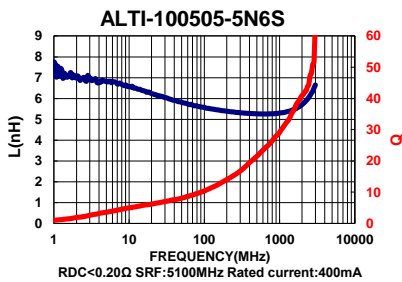
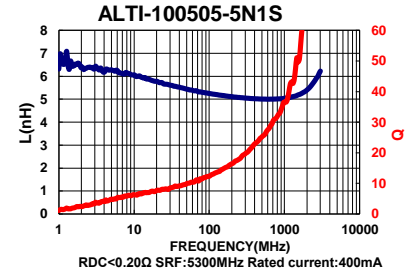
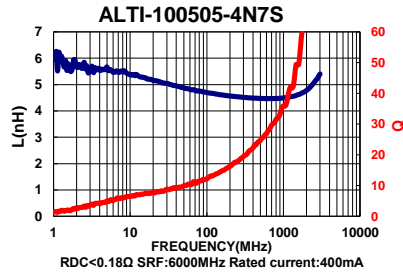
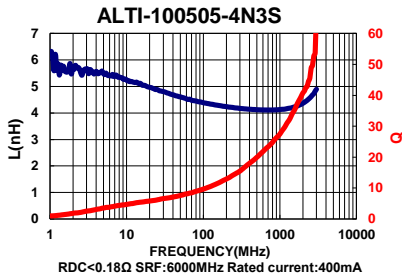


Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Mag.Layers approval. Please contact our sales department before ordering.



ALTI-100505 Type

Characteristics Graph

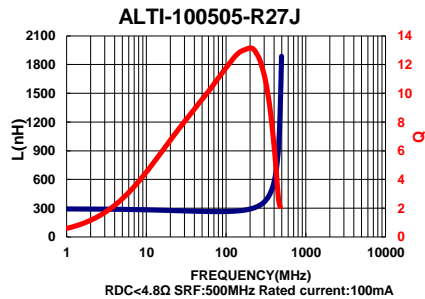
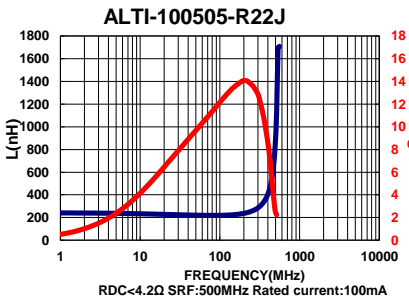
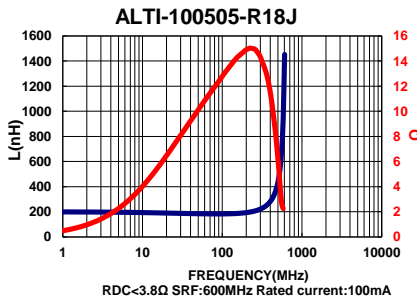
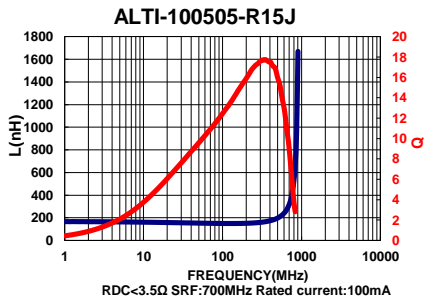
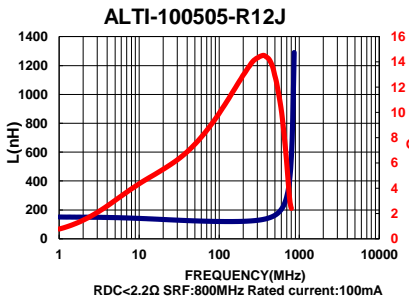
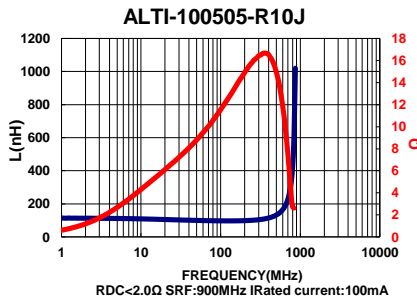
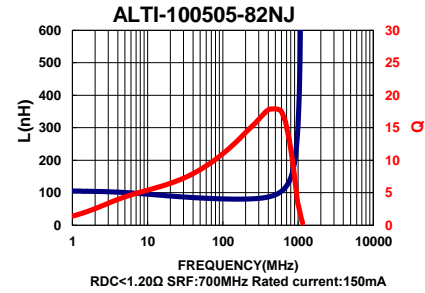
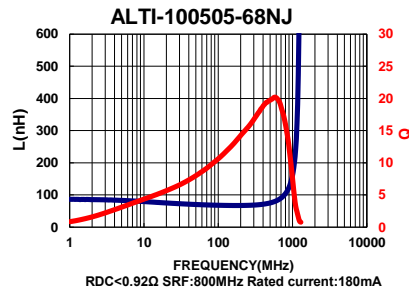
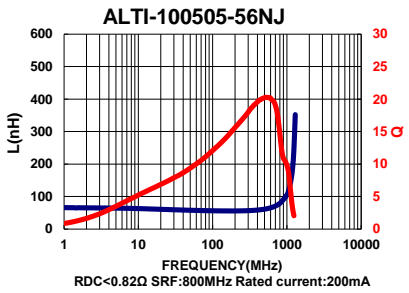
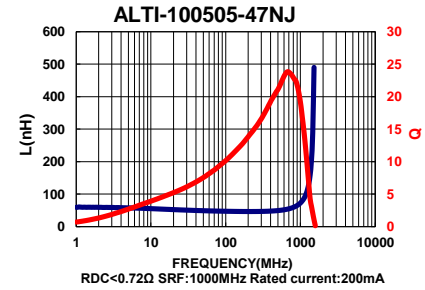
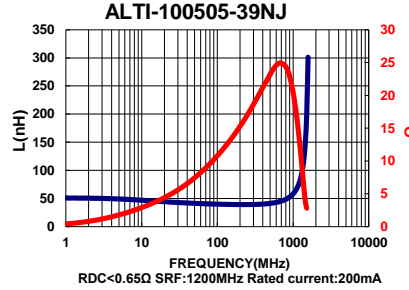
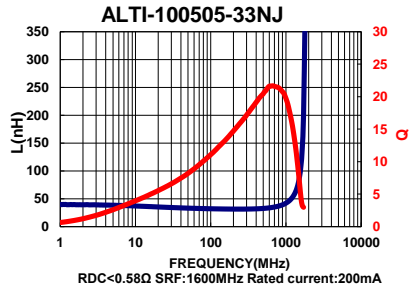


Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Mag.Layers approval. Please contact our sales department before ordering.



ALTI-100505 Type

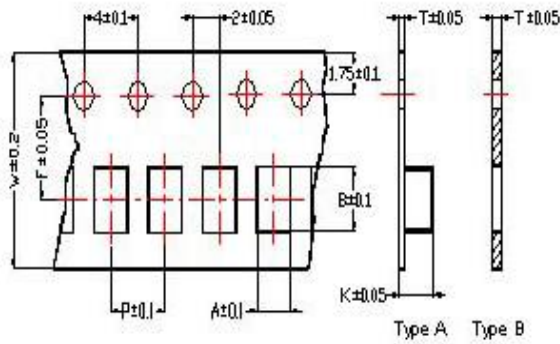
Characteristics Graph





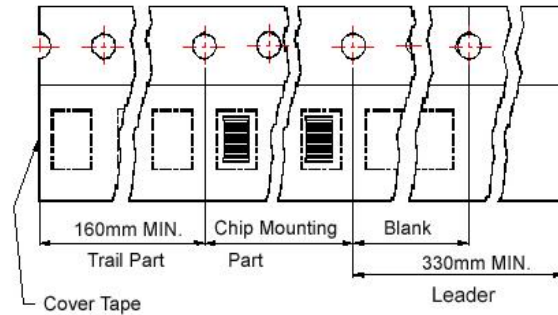
■ Packaging

Tape Dimensions

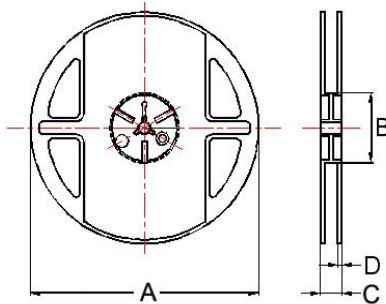


Tape Material

Carrier Tape: Polycarbonate (Tape A)
Carrier Tape: Paper (Tape B)
Cover Tape: Polystyrene



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
	A	B	T	W	P	F	Tape	A	B	C	D	
100505	0.62	1.12	0.60	8	2	3.5	B	178	60	12	1.5	10000