

Radial Leaded Capacitors - Ordering Information



Novacap ordering information - Radial Leaded - Standard and High Rel

0805	B	123	K	501	LE	A	R
Size	Dielectric	Capacitance	Tolerance	Voltage-VDCW	Lead Styles	Packing	RoHS
See charts	N = COG/NP0 B = X7R RN = COG/NP0 RoHS 2013 ≤ 200V RB = X7R RoHS 2013 ≤ 200V S = X8R not RoHS compliant	Value in Picofarads. Two significant figures, followed by number of zeros: 123 = 12,000pF	F = ±1%* G = ±2%* J = ±5% K = ±10% M = ±20% *COG parts only	Two significant figures, followed by number of zeros: 501 = 500V	LE, LB, LD, LR, LQ* = Yellow conformal coated LO = without any coating * Product and Case size dependant	No suffix = Bulk A = Ammo pack 2K/pack T = Tape & Reel 4K/Reel	R = RoHS Compliant

Novacap ordering information - Radial Leaded - High Temperature

2520	E	563	K	501	LG	W	R
Size	Dielectric	Capacitance	Tolerance	Voltage-VDCW	Lead Styles	Packing	RoHS
See charts	D = 200°C COG/NP0 E = 200°C Class II	Value in Picofarads. Two significant figures, followed by number of zeros: 563 = 56,000pF	F = ±1%* G = ±2%* J = ±5% K = ±10% M = ±20% *COG parts only	Two significant figures, followed by number of zeros: 501 = 500V	LC = Encapsulated LG = Black Epoxy Coated LO = without any coating	No suffix = Bulk W = Waffle pack	R = RoHS Compliant Only available on ≥250V

Syfer ordering information - Radial Leaded - Standard

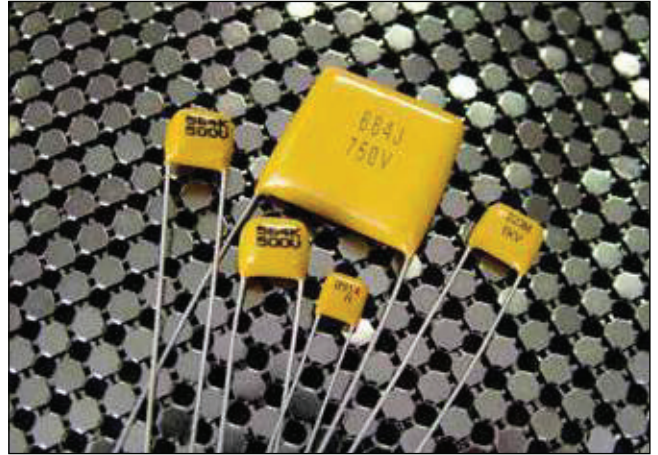
8111M	100	0102	J	C	□□□	□□□	
Type No./ Size ref.	Voltage d.c.		Capacitance in picofarads (pF)	Capacitance tolerance	Dielectric Rel Release codes	Suffix code	Suffix code
	Value	Marking code					
8111M	050 = 50V	(C)	<10pF Insert a P for the decimal point as the second character. eg. 8P20 = 8.2pF ≥10pF First digit is 0. Second and third digits are significant figures of capacitance code. Fourth digit is number of zeros eg. 0101 = 100pF	<10pF D : ± 0.5pF F : ± 1.0pF ≥10pF J : ± 5% K : ± 10% M : ± 20% ≥27pF G : ± 2% (COG/NP0 only).	C = COG/NP0 (1B/CG; CG/BP) X = X7R (2R1) To Special Order B = 2X1 (BX) R = 2C1 (BZ)	Used for specific customer requirements.	C42 denotes RoHS compliant. A31 or A97 denote non-RoHS tin/lead wires. Suffix A97 for 8111 to 8141 & A31 for 8151, 8161, 8171.
8111N	063 = 63V	(D)					
8121M	100 = 100V	(E)					
8121N	200 = 200V	(F)					
8121T	250 = 250V	-					
8131M	500 = 500V	(Q)					
8131T	630 = 630V	-					
8141M	1K0 = 1kV	-					
8151M	1K2 = 1.2kV	-					
8161M	1K5 = 1.5kV	-					
8165M	2K0 = 2kV	-					
8171M	2K5 = 2.5kV	-					
	3K0 = 3kV	-					
	4K0 = 4kV	-					
	5K0 = 5kV	-					
	6K0 = 6kV	-					
	8K0 = 8kV	-					
	10K = 10kV	-					
	12K = 12kV	-					

Note: The voltage code may be replaced with the complete voltage (e.g. 1500V = 1K5V) at Syfer's discretion. Marking may be over both sides of the component as necessary.

Standard Radial Leaded Capacitors - 50V to 5kV

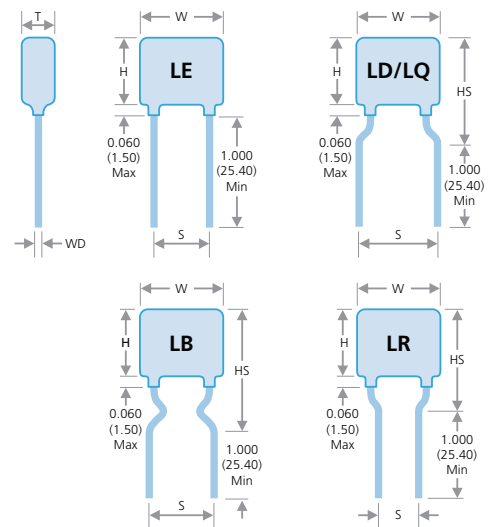
RoHS compliant interconnects, small case size, Radial Leaded capacitors available in COG/NP0, X7R and X8R dielectrics. The conformal coating and lead mounting style provide a rugged configuration for optimum performance. Units exhibit high capacitance efficiency per kV rating and find application in commercial/industrial use up to 5kV, such as power supplies and voltage multiplier circuits. They are offered in bulk pack or taped form, Ref EIA-RS468, making them suitable for automatic insertion.

- For ordering information see page 83.



Dimensions - inches/mm

Lead Style	LE	LD	LR	LD	LQ	LD	LE	LB
Size	0805	0805	1206	1206	1206	1210	1812	2225
Wmax	inches: 0.150 mm: 3.81	0.150 3.81	0.200 5.08	0.200 5.08	0.200 5.08	0.200 5.08	0.300 7.62	0.350 8.89
Hmax	inches: 0.150 mm: 3.81	0.150 3.81	0.150 3.81	0.150 3.81	0.150 3.81	0.200 5.08	0.250 6.35	0.350 8.89
Tmax	inches: 0.100 mm: 2.54	0.100 2.54	0.125 3.18	0.125 3.18	0.125 3.18	0.175 4.45	0.200 5.08	0.200 5.08
HSmax	inches: 0.200 mm: 5.08	0.250 6.35	0.250 6.35	0.250 6.35	0.250 6.35	0.300 7.62	0.350 8.89	0.500 12.70
S	inches ± 0.02 : 0.100 mm ± 0.51 : 2.54	0.200 5.08	0.100 2.54	0.200 5.08	0.250 6.35	0.200 5.08	0.200 5.08	0.200 5.08
WD	inches ± 0.02 : 0.020 mm ± 0.51 : 0.51	0.020 0.51	0.020 0.51	0.020 0.51	0.020 0.51	0.020 0.51	0.025 0.64	0.025 0.64



Capacitance and Voltage Selection - Commercial Radial Leaded Capacitors

Size	0805			1206			1210			1812			2225		
Min cap.	100	121	121	100	121	221	100	121	331	101	151	221	101	471	102
Dielectric	COG	X7R	X8R	COG	X7R	X8R	COG	X7R	X8R	COG	X7R	X8R	COG	X7R	X8R
50V	3.9nF	100nF	47nF	12nF	270nF	150nF	22nF	470nF	270nF	39nF	1.2μF	560nF	120nF	1.8μF	1.2μF
100V	3.9nF	68nF	33nF	10nF	180nF	100nF	18nF	330nF	180nF	27nF	820nF	390nF	82nF	1.5μF	1.0μF
250V	1.5nF	27nF	18nF	3.9nF	68nF	33nF	8.2nF	120nF	82nF	22nF	390nF	150nF	47nF	820nF	560nF
500V	820pF	12nF	5.6nF	1.8nF	22nF	15nF	4.7nF	56nF	39nF	12nF	150nF	56nF	27nF	330nF	150nF
1kV	470pF	2.7nF	•	1.0nF	6.8nF	•	2.2nF	15nF	•	8.2nF	47nF	•	15nF	100nF	•
2kV	•	•	•	390pF	1.0nF	•	820pF	2.2nF	•	2.7nF	6.8nF	•	3.9nF	15nF	•
3kV	•	•	•	•	•	•	•	•	•	1.2nF	2.7nF	•	1.8nF	5.6nF	•
4kV	•	•	•	•	•	•	•	•	•	820pF	1.2nF	•	1.0nF	1.5nF	•
5kV	•	•	•	•	•	•	•	•	•	•	•	•	560pF	1.0nF	•

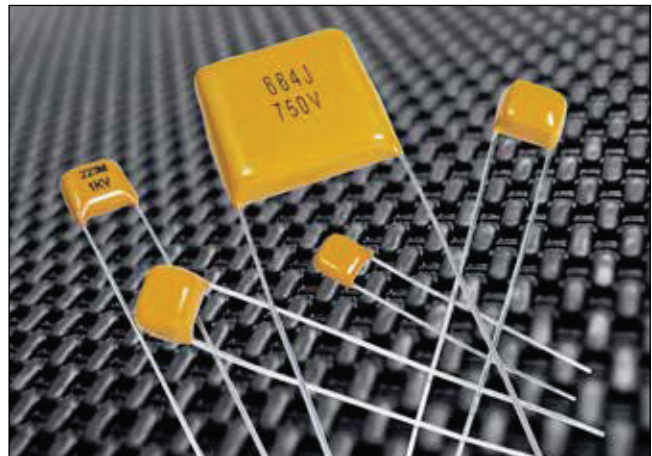
Notes: 1) Maximum capacitance values are shown above as 3 digit code: 2 significant figures followed by the no. of zeros e.g. 183 = 18,000pF. R denotes decimal e.g. 2R7 = 2.7pF.

- Parts in this range may be defined as dual-use under export control legislation as such may be subject to export licence restrictions. Please refer to page 12 for more information on the dual-use regulations and contact the Sales Office for further information on specific part numbers.

Standard Radial Leaded Capacitors - 500V to 10kV

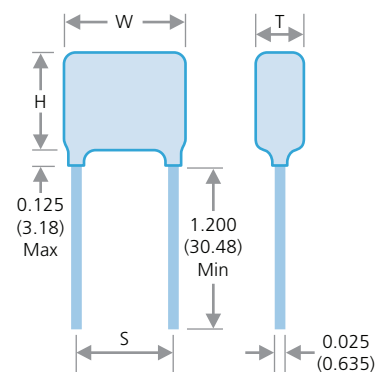
RoHS or Non RoHS Radial Leaded Capacitors available in COG/ NPO and X7R dielectrics with high voltage ratings from 500V. The conformal coating and lead mounting style provide a rugged configuration for optimum performance. Units exhibit high capacitance efficiency per kV rating and find application in commercial/industrial use up to 10kV, such as power supplies and voltage multiplier circuits. They are also offered without the conformal coating for less harsh environmental applications.

● For ordering information see page 83.



Dimensions - inches/mm

Lead Style	LE with conformal coating - LO without							
Size	1515	2520	3530	4540	5550	6560	7565	
Wmax	inches: 0.250 mm: 6.35	0.400 10.20	0.500 12.70	0.600 15.20	0.700 17.80	0.800 20.30	0.900 22.80	
Hmax	inches: 0.250 mm: 6.35	0.350 8.89	0.450 11.40	0.550 14.00	0.650 16.50	0.750 19.00	0.850 21.60	
Tmax	inches: 0.200 mm: 5.08	0.250 6.35	0.350 8.89	0.400 10.20	0.400 10.20	0.400 10.20	0.400 10.20	
S	inches ±0.02: mm ±0.51:	0.170 4.32	0.280 7.10	0.380 9.65	0.480 12.20	0.580 14.70	0.680 17.30	0.780 19.80



Capacitance and Voltage Selection - Standard Radial Leaded Capacitors

Size	1515		2520		3530		4540		5550		6560		7565	
Min cap.	100	151	390	102	390	102	390	102	390	102	560	222	101	222
Dielectric	COG	X7R	COG	X7R	COG	X7R	COG	X7R	COG	X7R	COG	X7R	COG	X7R
500V	8.2nF	150nF	39nF	680nF	68nF	1.0µF	120nF	1.8µF	180nF	2.2µF	270nF	3.3µF	330nF	4.7µF
600V	6.8nF	120nF	22nF	390nF	39nF	680nF	82nF	1.5µF	150nF	2.2µF	220nF	2.7µF	270nF	3.9µF
800V	6.8nF	82nF	18nF	270nF	33nF	390nF	68nF	820nF	120nF	1.5µF	180nF	2.2µF	220nF	2.7µF
1kV	5.6nF	56nF	12nF	180nF	27nF	330nF	56nF	680nF	100nF	1.0µF	150nF	1.5µF	180nF	2.2µF
2kV	2.7nF	8.2nF	5.6nF	27nF	15nF	68nF	33nF	180nF	47nF	270nF	68nF	390nF	100nF	470nF
3kV	1.2nF	3.3nF	2.7nF	12nF	10nF	27nF	22nF	68nF	33nF	120nF	47nF	180nF	56nF	220nF
4kV	6.8nF	1.2nF	1.5nF	4.7nF	5.6nF	15nF	12nF	33nF	18nF	47nF	27nF	82nF	39nF	100nF
5kV	•	•	1.0nF	2.7nF	3.3nF	10nF	8.2nF	18nF	12nF	33nF	18nF	47nF	22nF	56nF
6kV	•	•	•	•	1.8nF	5.6nF	3.9nF	12nF	5.6nF	22nF	10nF	33nF	12nF	39nF
7kV	•	•	•	•	1.2nF	4.7nF	2.7nF	8.2nF	4.7nF	15nF	6.8nF	22nF	8.2nF	27nF
8kV	•	•	•	•	1.0nF	3.3nF	2.2nF	6.8nF	3.3nF	12nF	5.6nF	15nF	6.8nF	22nF
9kV	•	•	•	•	•	2.7nF	1.8nF	4.7nF	2.7nF	10nF	3.9nF	12nF	4.7nF	18nF
10kV	•	•	•	•	•	1.8nF	1.5nF	3.9nF	2.2nF	6.8nF	3.3nF	10nF	3.9nF	12nF

Notes: 1) Maximum capacitance values are shown above as 3 digit code: 2 significant figures followed by the no. of zeros e.g. 183 = 18,000pF. R denotes decimal e.g. 2R7 = 2.7pF.

2) Parts in this range may be defined as dual-use under export control legislation as such may be subject to export licence restrictions. Please refer to page 12 for more information on the dual-use regulations and contact the Sales Office for further information on specific part numbers.

Standard Radial Leaded Capacitors - COG/NP0, X7R

Knowles produces a wide range of dipped radial leaded capacitors. These are available in rated voltages of 50V up to 6kV. Although our catalogue range extends to 6kV, we are able to offer a capability for specials up to 12kV. Our larger case sizes and high voltage versions are particularly in demand, especially for mil/aero and medical power supply applications. Please contact the Sales Office to discuss any special requirements.

- High working voltage - up to 12kVdc
- Large case sizes
- RoHS compliant versions
- Tin-lead plated wire option to reduce tin whiskers (quote suffix A97 for 8111 to 8141 & A31 for 8151, 8161, 8171).
- For ordering information see page 83.



		8111M	8111N	8121M	8121N	8121T	8131M	8131M T = 6.3mm	8131T	8141M	8151M	8151M T = 6.3mm	8161M	8161M T = 7.0mm	8171M	8171M T = 7.0mm
Min. cap values	COG/NP0	4.7pF	4.7pF	4.7pF	4.7pF	4.7pF	4.7pF	-	10pF	4.7pF	10pF	-	27pF	-	47pF	-
	X7R	100pF	100pF	100pF	100pF	330pF	100pF	-	150pF	100pF	470pF	-	1.0nF	-	1.8nF	-
50/63V	COG/NP0	5.6nF	5.6nF	33nF	33nF	33nF	220nF	-	100nF	220nF	330nF	-	680nF	-	1.0µF	-
	X7R	220nF	220nF	1.0µF	1.0µF	1.0µF	3.3µF	-	2.2µF	4.7µF	10µF	-	15µF	-	22µF	-
100V	COG/NP0	2.2nF	2.2nF	18nF	18nF	18nF	82nF	-	47nF	82nF	270nF	-	470nF	-	680nF	-
	X7R	100nF	100nF	680nF	680nF	680nF	2.7µF	-	1.5µF	2.7µF	5.6µF	-	10µF	-	15µF	-
200/ 250V	COG/NP0	1.0nF	1.0nF	8.2nF	8.2nF	8.2nF	47nF	68nF	22nF	47nF	120nF	180nF	270nF	330nF	390nF	560nF
	X7R	56nF	56nF	330nF	330nF	330nF	1.5µF	-	680nF	1.5µF	3.3µF	-	5.6µF	-	10µF	-
500V	COG/NP0	680pF	680pF	6.8nF	6.8nF	6.8nF	33nF	47nF	15nF	33nF	82nF	120nF	180nF	270nF	270nF	470nF
	X7R	15nF	15nF	150nF	150nF	150nF	820nF	-	330nF	820nF	1.0µF	-	1.8µF	-	3.3µF	-
630V	COG/NP0	560pF	560pF	3.9nF	3.9nF	3.9nF	22nF	39nF	10nF	22nF	68nF	100nF	120nF	180nF	220nF	390nF
	X7R	12nF	12nF	100nF	100nF	100nF	390nF	-	180nF	470nF	680nF	-	1.2µF	-	2.2µF	-
1kV	COG/NP0	180pF	180pF	2.2nF	2.2nF	2.2nF	18nF	27nF	6.8nF	18nF	47nF	82nF	82nF	150nF	150nF	270nF
	X7R	10nF	10nF	47nF	47nF	47nF	150nF	-	100nF	150nF	180nF	-	390nF	-	1.0µF	-
1.2kV	COG/NP0	120pF	120pF	1.5nF	1.5nF	1.5nF	12nF	22nF	4.7nF	12nF	33nF	56nF	68nF	100nF	100nF	180nF
	X7R	-	-	10nF	10nF	10nF	100nF	-	33nF	100nF	150nF	-	220nF	-	470nF	-
1.5kV	COG/NP0	82pF	82pF	820pF	820pF	820pF	6.8nF	12nF	2.7nF	6.8nF	22nF	39nF	39nF	68nF	68nF	120nF
	X7R	-	-	6.8nF	6.8nF	6.8nF	68nF	-	22nF	68nF	100nF	-	150nF	-	330nF	-
2kV	COG/NP0	39pF	39pF	390pF	390pF	390pF	4.7nF	6.8nF	1.5nF	4.7nF	10nF	18nF	22nF	39nF	39nF	68nF
	X7R	-	-	4.7nF	4.7nF	4.7nF	33nF	-	10nF	47nF	47nF	-	82nF	-	150nF	-
2.5kV	COG/NP0	-	-	220pF	220pF	220pF	2.2nF	3.9nF	820pF	2.2nF	6.8nF	12nF	12nF	22nF	22nF	39nF
	X7R	-	-	-	-	-	12nF	-	3.3nF	12nF	33nF	-	68nF	-	100nF	-
3kV	COG/NP0	-	-	150pF	150pF	150pF	1.8nF	2.7nF	560pF	1.8nF	4.7nF	8.2nF	10nF	18nF	15nF	27nF
	X7R	-	-	-	-	-	8.2nF	-	2.7nF	10nF	22nF	-	47nF	-	82nF	-
4kV	COG/NP0	-	-	-	-	-	820pF	1.5nF	270pF	820pF	1.8nF	3.3nF	4.7nF	6.8nF	8.2nF	15nF
	X7R	-	-	-	-	-	5.6nF	-	2.2nF	5.6nF	6.8nF	-	15nF	-	33nF	-
5kV	COG/NP0	-	-	-	-	-	560pF	1.0nF	180pF	560pF	1.5nF	2.2nF	2.7nF	4.7nF	5.6nF	10nF
	X7R	-	-	-	-	-	4.7nF	-	1.2nF	4.7nF	5.6nF	-	10nF	-	22nF	-
6kV	COG/NP0	-	-	-	-	-	390pF	680pF	120pF	390pF	1.0nF	1.5nF	1.8nF	3.3nF	3.9nF	6.8nF
	X7R	-	-	-	-	-	2.7nF	-	1.0nF	2.7nF	4.7nF	-	8.2nF	-	15nF	-
8kV	COG/NP0	-	-	-	-	-	-	-	-	-	150pF	-	330pF	-	680pF	-
	X7R	-	-	-	-	-	-	-	-	-	1.5nF	-	4.7nF	-	6.8nF	-
10kV	COG/NP0	-	-	-	-	-	-	-	-	-	100pF	-	180pF	-	470pF	-
	X7R	-	-	-	-	-	-	-	-	-	1.0nF	-	2.2nF	-	4.7nF	-
12kV	COG/NP0	-	-	-	-	-	-	-	-	-	68pF	-	120pF	-	220pF	-
	X7R	-	-	-	-	-	-	-	-	-	820pF	-	1.2nF	-	2.2nF	-
		8111M	8111N	8121M	8121N	8121T	8131M	8131M T = 6.3mm	8131T	8141M	8151M	8151M T = 6.3mm	8161M	8161M T = 7.0mm	8171M	8171M T = 7.0mm

Notes: 1) T = Maximum thickness.

2) Parts in this range may be defined as dual-use under export control legislation as such may be subject to export licence restrictions.

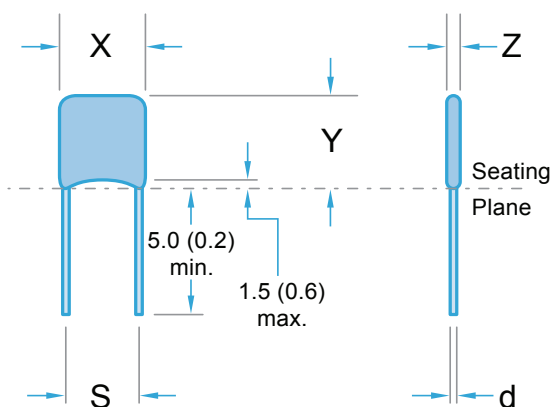
Please refer to page 12 for more information on the dual-use regulations and contact the Sales Office for further information on specific part numbers.

Standard Radial Leaded Capacitors - Packaging information

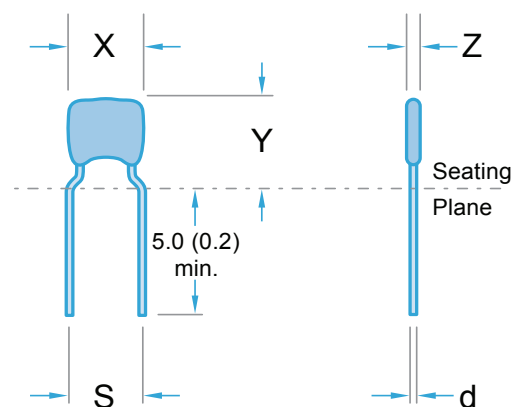
Dimensions - Radial Leaded capacitors

		Width	Height	Thickness	Lead Space	Lead Diameter
	Pattern	(X) max. mm (inches)	(Y) max. mm (inches)	(Z) max. mm (inches)	(S) mm (inches)	(d) mm (inches)
8111M	A	3.81 (0.15)	5.31 (0.21)	2.54 (0.10)	2.54 ±0.4 (0.1 ±0.016)	0.5 ±0.05 (0.02 ±0.002)
8111N	B	3.81 (0.15)	5.31 (0.21)	2.54 (0.10)	5.08 ±0.4 (0.2 ±0.016)	0.5 ±0.05 (0.02 ±0.002)
8121M	A	5.08 (0.20)	6.58 (0.26)	3.18 (0.125)	2.54 ±0.4 (0.1 ±0.016)	0.5 ±0.05 (0.02 ±0.002)
8121N	B	5.08 (0.20)	6.58 (0.26)	3.18 (0.125)	5.08 ±0.4 (0.2 ±0.016)	0.5 ±0.05 (0.02 ±0.002)
8121T	B	10.16 (0.40)	5.80 (0.23)	4.50 (0.18)	7.62 ±0.4 (0.30 ±0.016)	0.5 ±0.05 (0.02 ±0.002)
8131M	A	7.62 (0.30)	9.12 (0.36)	3.81/6.30 (0.15/0.25)	5.08 ±0.4 (0.2 ±0.016)	0.5 ±0.05 (0.02 ±0.002)
8131T	B	10.16 (0.40)	9.12 (0.36)	4.50 (0.18)	7.62 ±0.4 (0.30 ±0.016)	0.5 ±0.05 (0.02 ±0.002)
8141M	A	10.16 (0.40)	11.66 (0.46)	3.81 (0.15)	5.08 ±0.4 (0.2 ±0.016)	0.5 ±0.05 (0.02 ±0.002)
8151M	A	12.70 (0.50)	14.20 (0.56)	5.08/6.30 (0.20/0.25)	10.1 ±0.4 (0.4 ±0.016)	0.6 ±0.05 (0.025 ±0.002)
8161M	A	18.50 (0.73)	16.50 (0.65)	6.00/7.00 (0.24/0.28)	14.5 ±0.5 (0.57 ±0.02)	0.6 ±0.05 (0.025 ±0.002)
8165M	A	19.00 (0.75)	19.00 (0.75)	4.25 (0.17)	17.5 ±0.5 (0.67 ±0.02)	0.6 ±0.05 (0.025 ±0.002)
8171M	A	25.00 (0.98)	20.00 (0.79)	6.00/7.00 (0.24/0.28)	21.0 ±0.6 (0.83 ±0.024)	0.6 ±0.05 (0.025 ±0.002)

Pattern A



Pattern B

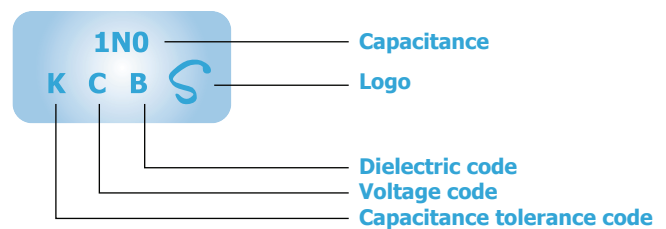


Note: Pattern A may be substituted with Pattern B at Knowles' discretion.

Marking information

All encapsulated capacitors are marked with: Capacitance value, tolerance, rated d.c. voltage, dielectric and, where size permits, the Syfer 'S' logo.

Example: 1000pF ±10% 50V 2X1 dielectric



Note: Parts in this range may be defined as dual-use under export control legislation as such may be subject to export licence restrictions. Please refer to page 12 for more information on the dual-use regulations and contact the Sales Office for further information on specific part numbers.

Radial Leded Capacitors - Packaging information

Cropped leads

Cropped leads between 4.0 (0.157) and 30.0 (1.18) are available to special order. Some of the preferred codes are listed below, together with the appropriate suffix code.

Dimensions as for standard product except as specified.

Suffix code - AE3 All radial ranges	Suffix code - AE4 All radial ranges	Suffix code - AD7 All radial ranges	Suffix code - AD5 All radial ranges
Lead length (L) 6 ± 1 (0.236 ± 0.04) from seating plane	Lead length (L) 4 ± 1 (0.162 ± 0.04) from seating plane	Lead length (L) 5 ± 1 (0.2 ± 0.04) from seating plane	Lead length (L) 10 ± 1 (0.4 ± 0.04) from seating plane

Dimensions mm (inches)

Snap in leads

Various forms of snap in leads (preformed) are available to special order, some of the preferred suffix codes are listed below.

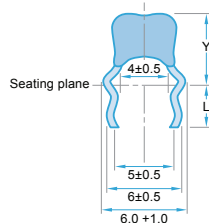
Dimensions as for standard product except as specified.

Suffix code - AD1

For PCB holes 0.9mm diameter
Types 8121N and 8131M

Dimensions

Y = 8121N 8 (0.315) Max
8131M 10 (0.394) Max
L = Min: 2.75 (0.108)
Max: 3.50 (0.138)

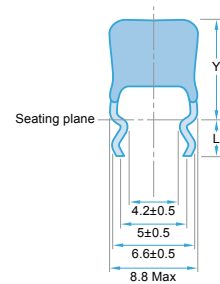


Suffix code - AD2

For PCB holes 1.2mm diameter
Types 8131M

Dimensions

Y = 10 (0.294) Max
L = Min: 2.75 (0.108)
Max: 3.50 (0.138)

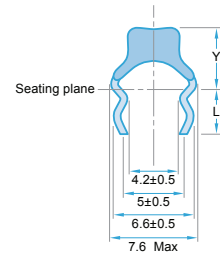


Suffix code - AD3

For PCB holes 1.2mm diameter
Types 8121N

Dimensions

Y = 8 (0.315) Max
L = Min: 2.75 (0.108)
Max: 3.50 (0.138)

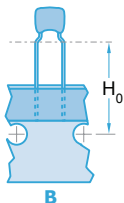
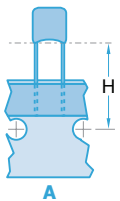


Bandoliered suffix codes

Dipped radial leded with 2.54 and 5.08mm lead spacing can be supplied bandoliered on reels or in ammo boxes to special order. Some of the preferred suffix codes for bandoliered products are given below.

For bandoliered products the minimum order quantity, pieces, is specified in the tables below, larger orders must be in multiples of this quantity.

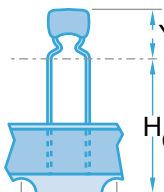
Dipped – straight and formed leads



Product code	Lead style	Diagram	H	H ₀	Suffix code		
					Reel	AMMO pack	
					2500pcs	1000pcs	2000pcs
8111M	Straight 2.54 crs	A	19±1	–	C01	C02	C11
8111M	Straight 2.54 crs	A	16±0.5	–	C30	C31	C32
8111N	Formed 5.08 crs	B	–	16±0.5	C01	C02	C11
8121M	Straight 2.54 crs	A	19±1	–	C01	C02	C11
8121M	Straight 2.54 crs	A	16±0.5	–	C30	C31	C32
8121N	Formed 5.08 crs	B	–	16±0.5	C01	C02	C11
8131M	Straight 5.08 crs	A	19±1	–	C01	C02	C11
8131M	Straight 5.08 crs	A	16±0.5	–	C30	C31	C32

Note: 8121T and 8131T available in bulk packaging only.

Dipped – stand-off lead form



This style has been developed to provide a meniscus-free seating plane with a stress relieving form for auto-insertion.

Product code	Lead style	Y max	H ₀	2500pcs	1000pcs	2000pcs
8111N	Formed 5.08 crs	7.5	16±0.5	C12	C23	C22
8111N	Formed 5.08 crs	7.5	19±1	C13	C25	C24
8121N	Formed 5.08 crs	8.5	16±0.5	C12	C23	C22
8121N	Formed 5.08 crs	8.5	19±1	C13	C25	C24

Radial Leaded Capacitors - Packaging information

For automatic insertion, the number of empty places in the tape per reel or fan-fold arrangement shall not exceed:

Three (3) missing components, when the component pitch is equivalent to one sprocket hole pitch.

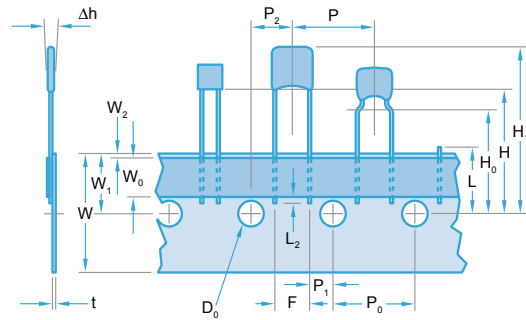
One (1) missing component, when the component pitch is equivalent to two sprocket hole pitches or more.

At the beginning and end of a reel the bandolier will exhibit at least 10 blank positions.

Minimum pull strength of product from tape = 5N.

Each reel/carton is provided with a label showing the: Manufacturer, product style, batch identification, quantity and date code.

Labelling with bar codes (code 39) is available on request.

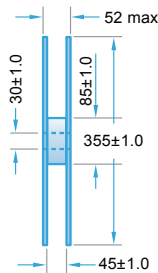
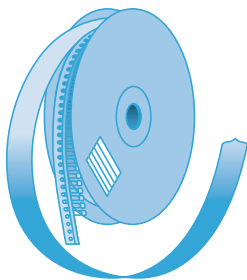


In accordance with IEC 60286 part 2.

Dimensions mm (inches)

Description	Symbol	2.5mm lead space	5mm lead space	Tolerance
Lead wire diameter	d	0.5 (0.02) 0.6 (0.025)	0.5 (0.02) 0.6 (0.025)	±0.05 (0.002)
Component pitch	P	12.7 (0.5)	12.7 (0.5)	1.00 (0.04)
Feed hole pitch	P ₀	12.7 (0.5)	12.7 (0.5)	±0.30 (0.01)
Feed hole centre to lead	P ₁	5.08 (0.2)	3.81 (0.15)	±0.70 (0.03)
Feed hole centre to component	P ₂	6.35 (0.25)	6.35 (0.25)	±0.70 (0.03)
Lead spacing	F	2.54 (0.10)	5.08 (0.20)	+0.6 (0.02) -0.1 (0.004)
Component alignment	Δh	0	0	±2.00(0.08)
Tape width	W	18.0 (0.70)	18.0 (0.70)	+1.00 (0.04) -0.50 (0.02)
Hold down tape width	W ₀	6.0 (0.23)	6.0 (0.23)	±0.30 (0.01)
Hole position	W ₁	9.0 (0.35)	9.0 (0.35)	±0.50 (0.02)
Hold down tape position	W ₂	0.50 (0.02)	0.50 (0.02)	Max
Height to seating plane from tape centre (straight leads) (2)	H	16 (0.63) to 20 (0.79)	16 (0.63) to 20 (0.79)	As required
Height to seating plane from tape centre (formed leads) (2)	H ₀	16 (0.63) to 20 (0.79)	16 (0.63) to 20 (0.79)	As required
Height to top of component from tape centre	H ₁	32.2 (1.26)	32.2 (1.26)	Max
Feed hole diameter	D ₀	4.0 (0.16)	4.0 (0.16)	±0.20 (0.008)
Carrier tape plus adhesive tape thickness	t	0.7 (0.03)	0.7 (0.03)	±0.20 (0.008)
Carrier tape thickness	-	0.5 (0.02)	0.5 (0.02)	±0.10 (0.004)
Cut out component snipped lead length from tape centre	L	11.0 (0.43)	11.0 (0.43)	Max
Lead wire protrusion from hold down	L ₂	2.0 (0.08)	2.0 (0.08)	Max

Bandoliered reels



The adhesive tape faces outwards. The dispensing direction is as shown. For the protection of the components a paper inlay is inserted between the windings of the bandolier. At the end of the bandolier this paper inlay continues for at least a further two rotations.

Bandoliered ammo packing

2 carton sizes

