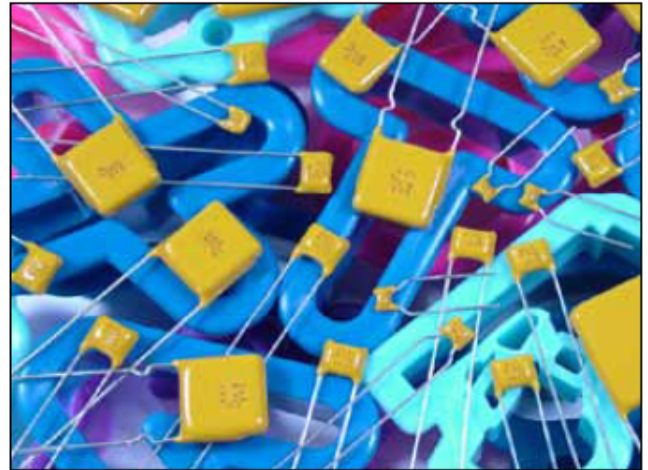


# Radial Leaded capacitors

Syfer Technology 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 our 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).



		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/NPO	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/NPO	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/NPO	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/NPO	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/NPO	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/NPO	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/NPO	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/NPO	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/NPO	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/NPO	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/NPO	-	-	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/NPO	-	-	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/NPO	-	-	-	-	-	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/NPO	-	-	-	-	-	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/NPO	-	-	-	-	-	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/NPO	-	-	-	-	-	-	-	-	-	150pF	-	330pF	-	680pF	-
	X7R	-	-	-	-	-	-	-	-	-	1.5nF	-	4.7nF	-	6.8nF	-
10kV	COG/NPO	-	-	-	-	-	-	-	-	-	100pF	-	180pF	-	470pF	-
	X7R	-	-	-	-	-	-	-	-	-	1.0nF	-	2.2nF	-	4.7nF	-
12kV	COG/NPO	-	-	-	-	-	-	-	-	-	68pF	-	120pF	-	220pF	-
	X7R	-	-	-	-	-	-	-	-	-	820pF	-	1.2nF	-	2.2nF	-

Note: T = Maximum thickness.

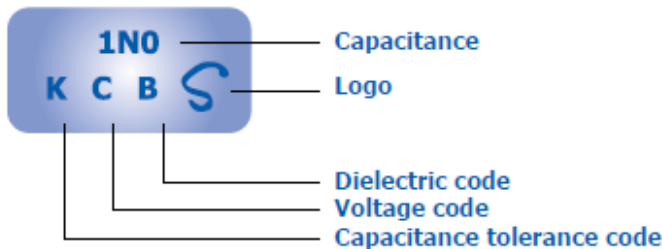
## Dimensions - Radial Leaded capacitors

		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)	20.5 ±0.5 (0.81 ±0.02)	0.6 ±0.05 (0.025 ±0.002)

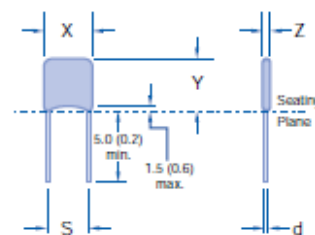
## Marking information

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

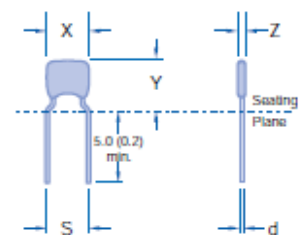
Example: 1000pF ±10% 50V 2X1 dielectric



## Pattern A



## Pattern B



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

## Ordering information - Radial Leaded capacitors

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

Notes: 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.