

StackiCap™ Capacitors - X7R

The StackiCap™ range offers a significant reduction in 'PCB real estate' for an equivalent capacitance value when board space is at a premium. For example, a standard 150nF chip is now available in a much smaller 3640 case size.

Knowles's unique patented* construction and FlexiCap™ termination material make the StackiCap™ range suitable for applications including: power supplies, lighting, aerospace electronics and high voltage applications where a large amount of capacitance is required. Further developments are on-going, please contact the Sales Office for details of the full range.

* StackiCap™ technology is protected by international patents (pending) EP2847776, WO2013186172A1, US20150146343A1 and CN104471660A.



Maximum capacitance

Up to 5.6µF

Maximum voltage

Up to 2kV

Insulation resistance

Time Constant (RxCr) (whichever is the least - 500s or 500MΩ)

Maximum capacitance values - StackiCap™ Capacitors

Chip size	1812	2220	3640
Thickness max.	3.2mm	4.2mm	4.2mm
200/250V	1.0µF	2.2µF	5.6µF
500V	470nF	1.2µF	2.7µF
630V	330nF	1.0µF	2.2µF
1kV	180nF	470nF	1.0µF
1.2kV	100nF	220nF	470nF
1.5kV	56nF	150nF	330nF
2kV	33nF	100nF	150nF

■ = AEC-Q200

Ordering information - StackiCap™ Capacitors

1812	Y	500	0474	K	J	T	WS2
Chip size	Termination	Voltage	Capacitance in picofarads (pF)	Capacitance tolerance	Dielectric	Packaging	Suffix code
1812 2220 3640	Y = FlexiCap™ termination base with nickel barrier (100% matte tin plating). RoHS compliant. Lead free. H = FlexiCap™ Termination base with nickel barrier (Tin/lead plating with minimum 10% lead). Not RoHS compliant.	200/250 = 200/250V 500 = 500V 630 = 630V 1K0 = 1kV 1K2 = 1.2kV 1K5 = 1.5kV 2K0 = 2kV	First digit is 0. Second and third digits are significant figures of capacitance code in picofarads (pF). Fourth digit is number of zeros eg. 0474 = 470nF Values are E12 series	J = ±5% K = ±10% M = ±20%	J = X7R (BME) E = X7R (2R1) AEC-Q200 S = X7R (BME) AEC-Q200 X = X7R	T = 178mm (7") reel R = 330mm (13") reel B = Bulk pack - tubs or trays	WS2

Reeled quantities - StackiCap™ Capacitors

	1812	2220	3640
178mm (7") Reel	500	500	-
330mm (13") Reel	2,000	2,000	500



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.