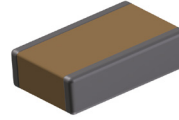




## • Applications

High speed energy transfer on semiconductor applications

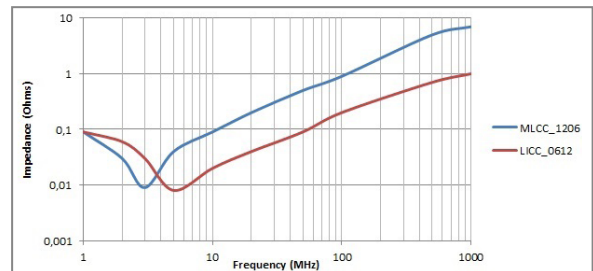
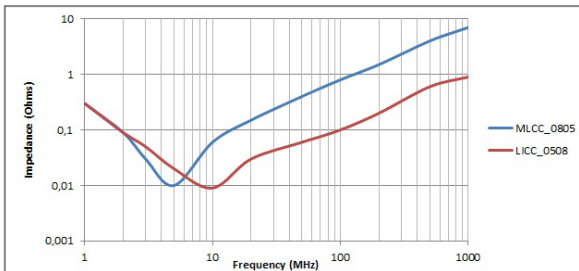


RoHS compliant

## • Electrical Parameters

Electrical Characteristics at + 25°C  
 Operating Temperature - 55°C, + 125°C  
 Temperature Coefficient ± 15% with 0Vdc applied  
 Dissipation Factor at 1kHz < 2.5%

Insulation Resistance (IR)  
 20°C/Un 10<sup>5</sup> MOhm or 1000 Ohm-Farad whichever is less



## • Quick Reference Data

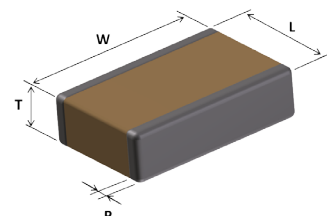
	0204	0306	0508	0612
6.3V	1nF - 22nF	1nF - 220nF	1nF - 1.5µF	1nF - 470nF
10V		1nF - 150nF	1nF - 220nF	1nF - 390nF
16V		1nF - 100nF	1nF - 220nF	1nF - 330nF
25V		1nF - 68nF	1nF - 150nF	1nF - 220nF
50V			1nF - 150nF	1nF - 150nF

## • Ordering Information

0612	Y	104	K	X	X	B	XX
SIZE	DIELECTRIC	CAPACITANCE	TOLERANCE	VOLTAGE	TERMINATION	PACKAGING	SPECIAL PARAMETERS
0204 0306 0508 0612	Y = X7R	Expressed in picofarads (pF). The first two digits are significant, the third digit give the number of noughts. Example : 102 = 1000pF	K = ± 10% M = ± 20%	R = 6.3V Q = 10V J = 16V X = 25V A = 50V	F = Palladium-Silver W = Silver with Gold plated finish X = Nickel with Tin plated finish P = Polymer with Tin plated finish C = Copper with Tin plated finish	B = 7" reel V = Bulk	Specific testing

## • Dimensions in millimeters

Designation	0204	0306	0508	0612
Length (L)	0.5 ± 0.05	0.8 ± 0.15	1.3 ± 0.25	1.6 ± 0.25
Width (W)	1 ± 0.05	1.6 ± 0.25	2 ± 0.25	3.2 ± 0.25
Thickness (T)	1.2	0.8	1.2	1.2
Termination (P)	Min			
	Max			



For P termination (Polymer type) add 0.20mm to all dimensions.

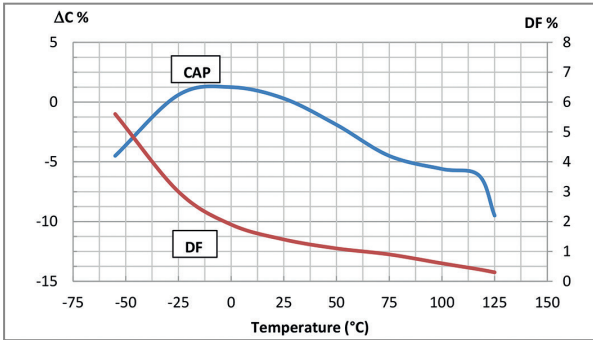


• Standard Sizes : 0204 to 0612

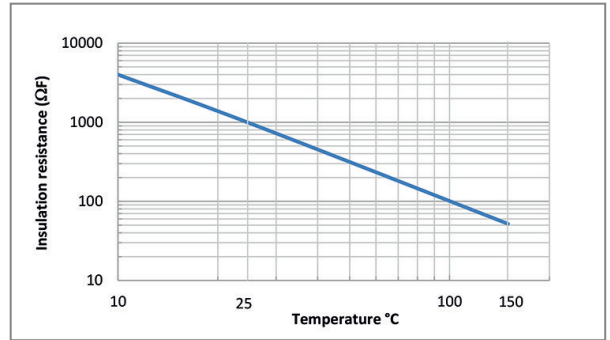
SIZE		0204	0306			0508					0612					
Voltage (Vdc)		6.3	6.3	10	16	25	6.3	10	16	25	50	6.3	10	16	25	50
Cap. Code	Cap.															
102	1nF															
122	1.2nF															
152	1.5nF															
182	1.8nF															
222	2.2nF															
272	2.7nF															
332	3.3nF															
392	3.9nF															
472	4.7nF															
562	5.6nF															
682	6.8nF															
822	8.2nF															
103	10nF															
123	12nF															
153	15nF															
183	18nF															
223	22nF															
273	27nF															
333	33nF															
393	39nF															
473	47nF															
563	56nF															
683	68nF															
823	82nF															
104	100nF															
124	120nF															
154	150nF															
184	180nF															
224	220nF															
274	270nF															
334	330nF															
394	390nF															
474	470nF															
564	560nF															
684	680nF															
824	820nF															
105	1µF															
125	1.2µF															
155	1.5µF															
185	1.8µF															
225	2.2µF															
275	2.7µF															
335	3.3µF															
395	3.9µF															
475	4.7µF															
565	5.6µF															
685	6.8µF															
825	8.2µF															
106	10µF															
126	12µF															
156	15µF															
186	18µF															
226	22µF															
276	27µF															
336	33µF															
366	36µF															
396	39µF															

## • Typical Characteristics

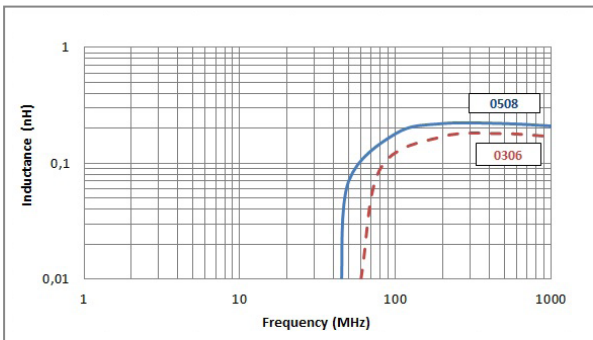
Temperature coefficient of capacitance



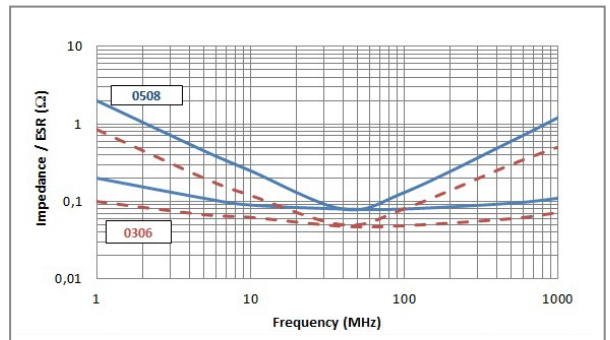
Insulation resistance vs. temperature



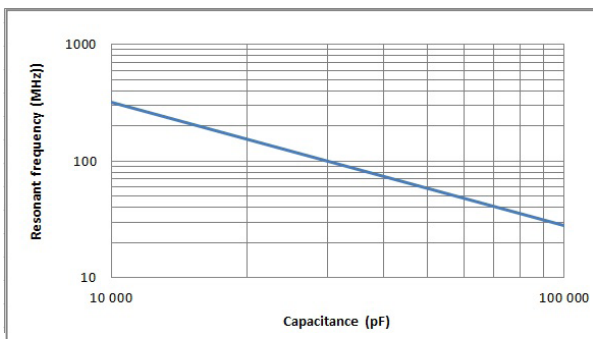
Inductance vs. frequency  
0508Y104KXX & 0306Y104KXX



Impedance & ESR vs. frequency  
0508Y104KXX & 0306Y104KXX



Series resonant frequency  
0612



Impedance & ESR vs. frequency  
0612Y823KXA

