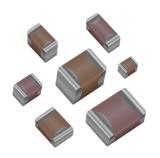
MLCC Tin/Lead Termination "B" (LD Series)







KYOCERA AVX will support those customers for commercial and military Multilayer Ceramic Capacitors with a termination consisting of 5% minimum lead. This termination is indicated by the use of a "B" in the 12th position of the KYOCERA AVX Catalog Part Number. This fulfills KYOCERA AVX's commitment to providing a full range of products to our customers. KYOCERA AVX has provided in the following pages a full range of values that we are currently offering in this special "B" termination. Please contact the factory if you require additional information on our MLCC Tin/Lead Termination "B" products.

PART NUMBER (SEE PAGE 4 FOR COMPLETE PART NUMBER EXPLANATION)

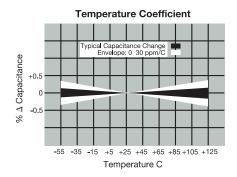
Not RoHS Compliant

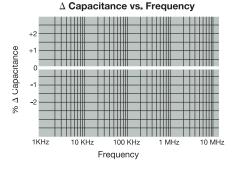
LD05	5	Α	101	J	<u>A</u>	В	2	Α
Size LD02 - 0402 LD03 - 0603	Voltage 6.3V = 6 10V = Z	Dielectric COG (NPO) = A X7R = C	Capacitance Code (In pF) 2 Sig. Digits +	Capacitance Tolerance B = ±.10 pF (<10pF)	Failure Rate A = Not	Terminations B = 5% min lead X = FLEXITERM®	Packaging 2 = 7" Reel 4 = 13" Reel	Special Code A = Std.
LD04 - 0504* LD05 - 0805 LD06 - 1206 LD10 - 1210 LD12 - 1812 LD13 - 1825 LD14 - 2225 LD20 - 2220	16V = Y 25V = 3 35V = D 50V = 5 100V = 1 200V = 2 500V = 7	X5R = D X8R = F	Number of Zeros	C = ±.25 pF (<10pF) D = ±.50 pF (<10pF) F = ±1% (≥ 10 pF) G = ±2% (≥ 10 pF) J = ±5% K = ±10% M = ±20%	Applicable 4 = Automotive	with 5% min lead** **X7R only	Contact Factory For Multiples*	Product

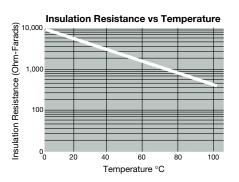
^{*}LD04 has the same CV ranges as LD03.

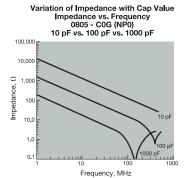
See FLEXITERM® section for CV options

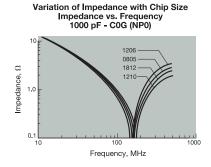
NOTE: Contact factory for availability of Tolerance Options for Specific Part Numbers. Contact factory for non-specified capacitance values.

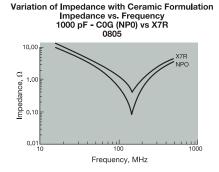












KYDCER3 | The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.





Parame	ter/Test	NP0 Specification Limits	Measuring	Conditions		
	perature Range	-55°C to +125°C	Temperature C	ycle Chamber		
Capac	itance	Within specified tolerance	Freq.: 1.0 MHz ± 10	% for cap ≤ 1000 pF		
(2	<30 pF: Q≥ 400+20 x Cap Value ≥30 pF: Q≥ 1000	1.0 kHz ± 10% fo Voltage: 1.0	Vrms ± .2V		
Insulation	Resistance	100,000MΩ or 1000MΩ - μF, whichever is less	Charge device with 60 ± 5 secs @ roo			
Dielectric	: Strength	No breakdown or visual defects	Charge device with 250 1-5 seconds, w/charge limited to 50 Note: Charge device with for 500V	and discharge current o mA (max) h 150% of rated voltage		
	Appearance	No defects	Deflection	n: 2mm		
Resistance to Flexure	Capacitance Variation	±5% or ±.5 pF, whichever is greater	Test Time: 30 seconds 7 1mm/sec			
Stresses	Q	Meets Initial Values (As Above)				
	Insulation Resistance	≥ Initial Value x 0.3	90 mm			
Solder	rability	≥ 95% of each terminal should be covered with fresh solder	Dip device in eutectic solder at 230 \pm 5° for 5.0 \pm 0.5 seconds			
	Appearance	No defects, <25% leaching of either end terminal				
	Capacitance Variation	≤ ±2.5% or ±.25 pF, whichever is greater	5			
Resistance to Solder Heat	Q	Meets Initial Values (As Above)	Dip device in eutectic s seconds. Store at room			
Soluel Heat	Insulation Resistance	Meets Initial Values (As Above)	hours before measurin	g electrical properties.		
	Dielectric Strength	Meets Initial Values (As Above)				
	Appearance	No visual defects	Step 1: -55°C ± 2°	30 ± 3 minutes		
	Capacitance Variation	≤ ±2.5% or ±.25 pF, whichever is greater	Step 2: Room Temp	≤ 3 minutes		
Thermal Shock	Q	Meets Initial Values (As Above)	Step 3: +125°C ± 2° 30 ± 3 minute			
	Insulation Resistance	Meets Initial Values (As Above)	Step 4: Room Temp ≤ 3 minutes			
	Dielectric Strength	Meets Initial Values (As Above)	Repeat for 5 cycles 24 hours at roo			
	Appearance	No visual defects				
	Capacitance Variation	≤ ±3.0% or ± .3 pF, whichever is greater	Charge device with twi			
Load Life	Q	≥ 30 pF: Q≥ 350 ≥10 pF, <30 pF: Q≥ 275 +5C/2 <10 pF: Q≥ 200 +10C	chamber set a for 1000 hou Remove from test chamb	ırs (+48, -0).		
	Insulation Resistance	≥ Initial Value x 0.3 (See Above)	temperature before me	for 24 hours		
	Dielectric Strength	Meets Initial Values (As Above)				
	Appearance	No visual defects				
	Capacitance Variation	≤ ±5.0% or ± .5 pF, whichever is greater	Store in a test chamber s	set at 85°C ± 2°C/ 85% ±		
Load Humidity	Q	≥ 30 pF: Q≥ 350 ≥10 pF, <30 pF: Q≥ 275 +5C/2 <10 pF: Q≥ 200 +10C	5% relative humidi (+48, -0) with rated	ity for 1000 hours d voltage applied.		
	Insulation Resistance	≥ Initial Value x 0.3 (See Above)	Remove from chamber temperature for 24 ± 2 h			
	Dielectric Strength	Meets Initial Values (As Above)				





PREFERRED SIZES ARE SHADED

			-]		
SIZE			LD02				03				LD05					LD0			
Solderi			flow/Wa				//Wave				flow/Wav					Reflow/			
Packag			All Paper .00 ± 0.1				aper ± 0.15				er/Embos				Р	aper/Em 3.20 ±			
(L) Length	mm (in.)		.00 ± 0.1 040 ± 0.0				± 0.15 ± 0.006)				.01 ± 0.20)79 ± 0.00			(0.126 ± 0.008)					
\A/\ \A/; alab	mm		.50 ± 0.1				± 0.15				.25 ± 0.20			1.60 ± 0.20					
W) Width	(in.)		020 ± 0.0			(0.032					49 ± 0.00			(0.063 ± 0.008)					
(t) Terminal	mm		.25 ± 0.1				± 0.15				.50 ± 0.2				0.50 ± 0.25 (0.020 ± 0.010)				
	(in.)	16	010 ± 0.0 25	50	16	(0.014 :	± 0.006) 50	100	16	25	020 ± 0.01 50	100	200	16	25	0.020 ±	100	200	500
Сар	0.5	C	C	C	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
(pF)	1.0	С	С	С	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	1.2	С	C	C	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	1.5	C	C	C	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	2.2	Č	c	c	Ğ	Ğ	Ğ	Ğ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ
	2.7	С	С	С	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	3.3	С	С	С	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	3.9 4.7	C	C	C	G G	G G	G G	G G	J	J	J	J	J	J	J	J	J J	J J	J
	5.6	C	C	C	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	6.8	С	С	С	G	G	G	G	J	J	J	J	J	Ĵ	J	J	J	J	J
	8.2	С	С	С	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	10 12	C C	C	C	G G	G G	G G	G G	J	J	J	J	J	J	J	J	J	J	J
	15	С	Č	Č	G	G	G	G	Ĵ	J	Ĵ	Ĵ	Ĵ	J	Ĵ	Ĵ	Ĵ	J	J
	18	С	С	С	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	22 27	C C	C	C	G G	G	G G	G G	J	J	J	J	J	J J	J	J	J J	J J	J
	33	C	C	C	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	39	C	c	c	G	G	G	G	Ĵ	Ĵ	Ĵ	Ĵ	J	Ĵ	J	J	J	J	Ĵ
	47	C	С	С	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	56 68	C C	C	C	G G	G G	G G	G G	J	J	J	J	J	J	J	J	J	J	J
	82	C	Č	Č	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	100	С	С	С	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	120	С	C	С	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J
	150 180	C	C	C	G G	G	G	G G	J	J	J	J	J	J	J	J	J	J	J
	220	Č	Č	Č	Ğ	Ğ	Ğ	Ğ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	М
	270	С	С	С	G	G	G	G	J	J	J	J	М	J	J	J	J	J	М
	330 390	СС	C	C	G G	G G	G G	G G	J	J	J	J	M M	J	J	J	J	J	M M
	470	C	C	C	G	G	G	G	J	J	J	J	M	J	J	J	J	J	M
	560				G	G	G		J	J	J	J	М	J	J	J	J	J	М
	680				G	G	G		J	J	J	J		J	J	J	J	J	Р
	820 1000				G G	G	G		J	J	J	J		J	J	J	J	M Q	
	1200				3	G			J	J	J	3		J	J	J	J	Q	
	1500								J	J	J			J	J	J	М	Q	Ш
	1800								J	J	J			J	J	M	M P		
	2200 2700								J	J	N N			J	J	M M	l P		
	3300								J	J	.,			J	J	M	P		\Box
	3900								J	J				J	J	М	Р		
	4700 5600								J	J				J	J	M	Р		\vdash
	6800													M	M	IVI			
	8200													М	М				
Cap	0.010	_												М	М]
(pF)	0.012 0.015			I _	l	 	I												
	0.013		† _	<u> </u>		W_	<u> </u>									1			
	0.022			$\overline{}$	_ `	J),	ÎT												
	0.027		∤ ()	. كرار	<u> </u>								-				\square
	0.033					-													
	0.039				4														
	0.068		Γ	1	' ' 		_												
	0.082																		
	0.1 WVDC	16	25	50	16	25	50	100	16	25	50	100	200	16	25	50	100	200	500
	SIZE	10	LD02	_ 50	10		03	100	10	س ا	LD05	100	200	10	, W	LD0		200	<u> </u>
	U.LL																_		

Letter	Α	С	Е	G	J	K	М	N	Р	Q	Х	Υ	Z
Max.	0.33	0.56	0.71	0.90	0.94	1.02	1.27	1.40	1.52	1.78	2.29	2.54	2.79
Thickness	(0.013)	(0.022)	(0.028)	(0.035)	(0.037)	(0.040)	(0.050)	(0.055)	(0.060)	(0.070)	(0.090)	(0.100)	(0.110)
	PAPER					EMBOSSED							





PREFERRED SIZES ARE SHADED

LINKEL	JULE															ПП	
SIZ	Έ			LD10					LD12				LD13			LD14	
Solde				Reflow On					Reflow Or				Reflow Only			Reflow Only	
Packa	ging mm			er/Embo 3.20 + 0.2					II Embos: 4.50 ± 0.3				All Embossed 4.50 ± 0.30			All Embossed 5.72 ± 0.25	
(L) Length	(in.)		(0.	126 ± 0.0	08)			(0	.177 ± 0.0)12)			(0.177 ± 0.012)	(0.225 ± 0.010)
W) Width	mm (in.)		(0.	2.50 ± 0.2 098 ± 0.0	08)			(0.126 ± 0.008) (0.252		6.40 ± 0.40 (0.252 ± 0.016)		(6.35 ± 0.25 0.250 ± 0.010)			
(t) Terminal	mm (in.)		(0.	0.50 ± 0.2 020 ± 0.0					0.61 ± 0.3 .024 ± 0.0				0.61 ± 0.36 (0.024 ± 0.014)	(0.64 ± 0.39 0.025 ± 0.015)
Сар	WVDC 0.5	25	50	100	200	500	25	50	100	200	500	50	100	200	50	100	200
(pF)	1.0																
	1.2 1.5																
	1.8 2.2														I	7	W.
	2.7														_ <		W
	3.3 3.9																
	4.7														_ `	\ \	
	5.6 6.8															T T	
	8.2 10					J											
	12					J											
	15 18					J											
	22 27					J J											
	33					J											
	39 47					J											
	56 68					J											
	82					J											
	100 120					J J											
	150 180					J J											
	220					J											
	270 330					J											
	390					М											
	470 560	J	J	J	J	M M											
	680 820	J	J	J	J	M M											
	1000	J	J	J	J	М	K	K	K	K	М	М	M	М	М	М	P
	1200 1500	J	J	J	M M	M M	K K	K K	K K	K K	M M	M M	M M	M M	M M	M M	P P
	1800 2200	J	J	J	M Q		K K	K K	K K	K K	M P	M M	M M	M M	M M	M M	P P
	2700	J	J	J	Q		K	K	K	Р	Q	М	М	М	М	М	Р
	3300 3900	J J	J	J M			P P	P P	P P	P P	Q Q	M M	M M	M M	M M	M M	P P
	4700 5600	J	J	М			P P	P P	P P	P P	Y	M M	M M	M M	M M	M M	P P
	6800	J	J				Р	Р	Q	Q	Y	М	М	M	М	М	Р
Сар	8200 0.010	J	J				P P	P	Q Q	Q Q	Y	M M	M M		M M	M M	P P
(pF)	0.012 0.015	J	J				P P	P P	Q Q	X X	Y	M M	M M		M M	M M	P Y
	0.018						P	Р	Х	Х	Y	Р	M		М	М	Y
	0.022 0.027						P Q	P X	X	X Z		P P			M P	Y Y	Y
	0.033 0.039						Q X	X	X Z	Z Z		P P			P P		
	0.047						Х	X	Z	Z		P			Р		
	0.068 0.082						Z Z	Z Z	Z Z						P Q		
	0.1 WVDC	25	50	100	200	500	Z 25	Z 50	Z 100	200	500	50	100	200	Q 50	100	200
SIZ		20		LD10		300		, 50	LD12		, 500	30	LD13	200	30	LD14	200
																_	
Letter	0.33	0.5		E 0.71	G 0.90	J 0.9		1.02	M 1.27		.40	P 1.52	Q >	_	2.79	-	
Max. Thickness	(0.013)	(0.02		0.71	(0.035)	(0.0)		(0.040)	(0.05)	i i	055)	i i	(0.070) (0.0				
				PAPER	/							FMB0S				1	



PAPER

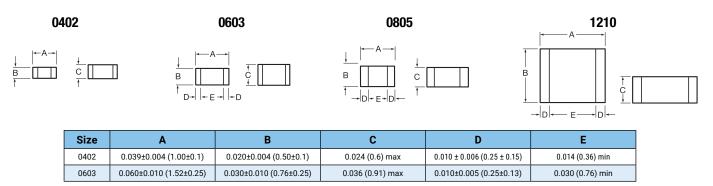
EMBOSSED

COG (NPO), Sn/Pb - "U" Series Capacitors

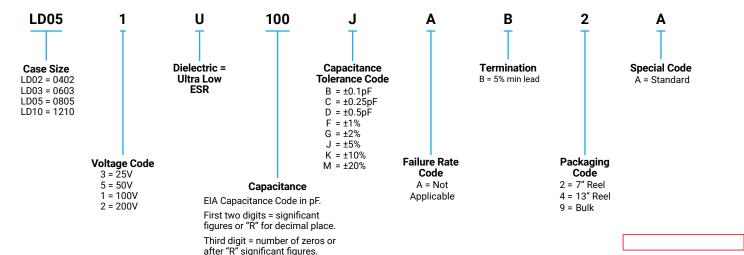


GENERAL INFORMATION

"U" Series capacitors are C0G (NP0) chip capacitors specially designed for "Ultra" low ESR for applications in the communications market. Max ESR and effective capacitance are met on each value producing lot to lot uniformity. Sizes available are EIA chip sizes 0603, 0805, and 1210.



HOW TO ORDER



HOW TO ORDER

ELECTRICAL CHARACTERISTICS

Capacitance Values and Tolerances:

Size 0402 - 0.2 pF to 22 pF @ 1 MHz Size 0603 - 1.0 pF to 100 pF @ 1 MHz Size 0805 - 1.6 pF to 160 pF @ 1 MHz Size 1210 - 2.4 pF to 1000 pF @ 1 MHz

Temperature Coefficient of Capacitance (TC):

0±30 ppm/°C (-55° to +125°C)

Insulation Resistance (IR):

 $10^{12} \Omega$ min. @ 25°C and rated WVDC $10^{11} \Omega$ min. @ 125° C and rated WVDC

Working Voltage (WVDC):

Working Voltage 0402 - 50, 25 WVDC 0603 - 200, 100, 50 WVDC 0805 - 200.100 WVDC 1210 - 200, 100 WVDC

Dielectric Working Voltage (DWV):

250% of rated WVDC

Equivalent Series Resistance Typical (ESR):

040 - See Performance Curve, page 306 0603 - See Performance Curve, page 306 0805 - See Performance Curve, page 306 1210 - See Performance Curve, page 306

Laser marking EIA J marking standard (except 0603) (capacitance code and tolerance upon request).

Military Specifications

Meets or exceeds the requirements of MIL-C-55681

COG (NPO), Sn/Pb - Capacitance Range



CIZE		1003						LD10		
SIZE		LD02		LD03			05			
Solderin	ř—	All Paper		II Pape			bossed		bossed	
(I) I am mth	mm	1.00± 0.10	1.	60 ±0.1	5		± 0.20	3.20:	± 0.20	
(L) Length	(in.)	(0.040± 0.004)		63±0.0		0.0	79 ± 08)	`	±0.008)	
(W) Width	mm	0.50 ±0.10		81±0.1			±0.20		±0.20	
(11) 111.001	(in.)	(0.020 ±0.004)		32±0.0		_	±0.008)	_	±0.008)	
(t) Terminal	mm	0.25±0.15	0.35±0.15				±0.25		±0.25	
**	(in.)	(0.010±0.006)	<u> </u>			±0.010)	(0.020:			
WVDC		50	50	100	200	100	200	100	200	
Сар	0.2	F	Α	Α	Α	Н	Н	D	D	
(pF)	0.3	F	Α	Α	Α	Н	Н	D	D	
	0.4	F	Α	Α	Α	Н	Н	D	D	
	0.5	F	Α	Α	Α	Н	Н	D	D	
	0.6	F	Α	Α	Α	Н	Н	D	D	
	0.7	F	Α	Α	Α	Н	Н	D	D	
	0.8	F	Α	Α	Α	Н	Н	D	D	
	0.9	F	Α	Α	Α	Н	Н	D	D	
	1.0	F	Α	Α	Α	Н	Н	D	D	
	1.1	F	Α	Α	Α	Н	Н	D	D	
	1.2	F	Α	Α	Α	Н	Н	D	D	
	1.3	F	Α	Α	Α	Н	Н	D	D	
	1.4	F	Α	Α	Α	Н	Н	D	D	
	1.5	F	Α	Α	Α	Н	Н	D	D	
	1.6	F	Α	Α	Α	Н	Н	D	D	
	1.7	F	Α	Α	Α	Н	Н	D	D	
	1.8	F	Α	Α	Α	Н	Н	D	D	
	1.9	F	Α	Α	Α	Н	Н	D	D	
	2.0	F	Α	Α	Α	Н	Н	D	D	
	2.1	F	Α	Α	Α	Н	Н	D	D	
	2.2	F	Α	Α	Α	Н	Н	D	D	
	2.4	F	Α	Α	Α	Н	Н	D	D	
	2.7	F	Α	Α	Α	Н	Н	D	D	
	3.0	F	Α	Α	Α	Н	Н	D	D	
	3.3	F	Α	Α	Α	Н	Н	D	D	
	3.6	F	Α	Α	Α	Н	Н	D	D	
	3.9	F	Α	Α	Α	Н	Н	D	D	
	4.3	F	Α	Α	Α	Н	Н	D	D	
	4.7	F	Α	Α	Α	Н	Н	D	D	
	5.1	F	Α	Α	Α	Н	Н	D	D	
	5.6	F	Α	Α	Α	Н	Н	D	D	
	6.2	F	Α	Α	Α	Н	Н	D	D	
	6.8	F	Α	Α	Α	Н	Н	D	D	
	7.5	F	Α	Α	Α	Н	Н	D	D	
	8.2	F	Α	Α	Α	Н	Н	D	D	
	9.1	F	Α	Α	Α	Н	Н	D	D	
	10	F	Α	Α	Α	Н	Н	D	D	
	11	F	Α	Α	Α	Н	Н	D	D	
	12	F	Α	Α	Α	Н	Н	D	D	
	18	F	Α	Α	Α	Н	Н	D	D	
	20	F	Α	Α	Α	Н	Н	D	D	
	22	F	Α	Α	Α	Н	Н	D	D	
WVDC		50	50	100	200	100	200	100	200	
SIZE		LD02		LD03		LD	05	LD	10	

SIZE		LD02 LD03					0.5	LD10		
							05			
Soldering		All Paper		II Pape		All Em			bossed £ 0.20	
(I) I amenth	mm	1.00± 0.10	1.7	60 ±0.1	5			3.20	£ 0.20	
(L) Length	(in.)	(0.040± 0.004)	,	63±0.0		`0.0		,	±0.008)	
(W) Width	mm	0.50 ±0.10	-	81±0.1		1.25			±0.20	
(11) 1114111	(in.)	(0.020 ±0.004)	_	32±0.0		(0.049		(0.098±0.008)		
(t) Terminal	mm	0.25±0.15		35±0.1		0.50			±0.25	
	(in.)	(0.010±0.006)		14±0.0		(0.020:			±0.010)	
WVDC		50	50	100	200	100	200	100	200	
	24	F	Α	Α	Α	Н	Н	D	D	
	27	F	Α	Α	Α	Н	Н	D	D	
Сар	30	F	Α	Α	Α	Н	Н	D	D	
(pF)	33	F	Α	Α	Α	Н	Н	D	D	
	36	F	Α	Α	Α	Н	Н	D	D	
	39	F	Α	Α	Α	Н	Н	D	D	
	43		Α	Α	Α	Н	Н	D	D	
	47		Α	Α	Α	Н	Н	D	D	
	51		Α	Α	Α	Н	Н	D	D	
	56		Α	Α	Α	Н	Н	D	D	
	68		Α	Α	Α	Н	Н	D	D	
	75		Α	Α		Н	Н	D	D	
	82		Α	Α		Н	Н	D	D	
91			Α	Α		Н	Н	D	D	
100			Α	Α		Н	Н	D	D	
	110							D	D	
	120							D	D	
	130							D	D	
	140							D	D	
	150 160							D D	D D	
	180							D	D	
	200							D	D	
	220							D	D	
	270							D	D	
	300							D	D	
	330							D	D	
	360							D	D	
	390							D	D	
	430							D	D	
	470							D		
	510							D		
	560							D		
	620							D		
	680							D		
	750							D		
	820							D		
	910							D		
	1000							D		
WVDC		50	50	100	200	100	200	100	200	
SIZE		LD02	LD03			LD	05	LD10		

Case Size	0402 (KGQ05)	0603 (KGQ15)	0805 (KGQ21)	1210 (KGQ32)			
Thickness Letter	F	Α	Н	D			
Max Thickness(mm)	0.60	0.90	1.15	1.40			
Carrier Tape	PAPER	PAPER	PAPER	PAPER			
Packaging Code 7"reel	Н	Т	T	Т			
Packaging Code 13"reel	N	М	M	M			
		PAF	PAPER				

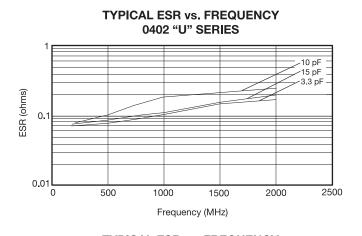
TOLERANCE OPTIONS

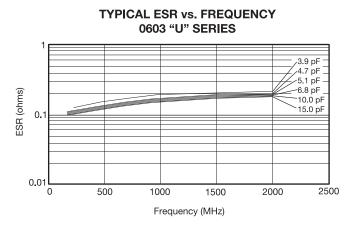
Capacitance Range	Available Tolerances
0.20-0.50 pF	B, C
0.60-6.2 pF	B,C, D
6.8- 9.1 pF	B, C, J, K, M
10-1000 pF	F,G, J, K, M

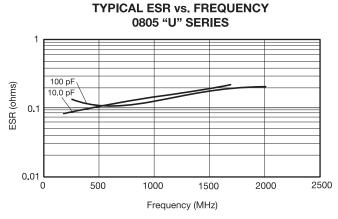
COG (NPO), Sn/Pb - Capacitance Range

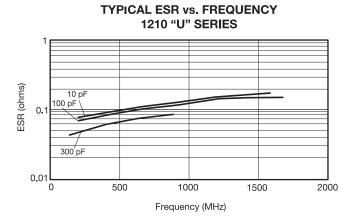


ULTRA LOW ESR, "U" SERIES

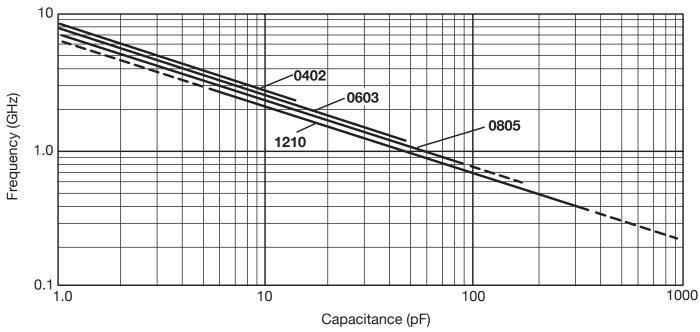








TYPICAL SERIES RESONANT FREQUENCY "U" SERIES CHIP



KYDEER3 | The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

X8R - General Specifications





KYOCERA AVX will support those customers for commercial and military Multilayer Ceramic Capacitors with a termination consisting of 5% minimum lead. This termination is indicated by the use of a "B" in the 12th position of the KYOCERA AVX Catalog Part Number. This fulfills KYOCERA AVX's commitment to providing a full range of products to our customers. KYOCERA AVX has provided in the following pages a full range of values that we are currently offering in this special "B" termination. Please contact the factory if you require additional information on our MLCC Tin/Lead Termination "B" products.

Not RoHS Compliant

PART NUMBER (SEE PAGE 4 FOR COMPLETE PART NUMBER EXPLANATION)

LD05	<u>5</u>	F	101		<u>A</u>	<u>B</u>	<u>2</u>	<u>A</u>
Size LD02 - 0402 LD03 - 0603 LD04 - 0504* LD05 - 0805 LD06 - 1206 LD10 - 1210 LD12 - 1812 LD13 - 1825 LD14 - 2225 LD20 - 2220	Voltage 6.3V = 6 10V = Z 16V = Y 25V = 3 35V = D 50V = 5 100V = 1 200V = 2 500V = 7	Dielectric X8R = F	Capacitance Code (In pF) 2 Sig. Digits + Number of Zeros	Capacitance Tolerance B = ±.10 pF (<10pF) C = ±.25 pF (<10pF) D = ±.50 pF (<10pF) F = ±1% (≥ 10 pF) G = ±2% (≥ 10 pF) J = ±5% K = ±10% M = ±20%	Failure Rate A = Not Applicable	Terminations B = 5% min lead X = FLEXITERM® with 5% min lead** **X7R only	Packaging 2 = 7" Reel 4 = 13" Reel Contact Factory For Multiples*	Special Code A = Std. Product

LD04 has the same CV ranges as LD03.

See FLEXITERM® section for CV options

NOTE: Contact factory for availability of Tolerance Options for Specific Part Numbers. Contact factory for non-specified capacitance values.





Parame	ter/Test	X8R Specification Limits	Measuring (Conditions			
Operating Tem	perature Range	-55°C to +150°C	Temperature C	ycle Chamber			
Capac	itance	Within specified tolerance	From : 1.0 k	d I = 1 100/			
Dissipati	on Factor	≤ 2.5% for ≥ 50V DC rating ≤ 3.5% for 25V DC and 16V DC rating	Freq.: 1.0 k Voltage: 1.0				
Insulation	Resistance	100,000ΜΩ or 1000ΜΩ - μF, whichever is less	Charge device with rated voltage for 120 ± 5 secs @ room temp/humidity				
Dielectric	: Strength	No breakdown or visual defects	Charge device with 250% of rated voltage for 1-5 seconds, w/charge and discharge current limited to 50 mA (max) Note: Charge device with 150% of rated voltage for 500V devices.				
	Appearance	No defects	Deflectio	n: 2mm			
Resistance to	Capacitance Variation	≤ ±12%	Deflection: 2mm Test Time: 30 seconds 1mm/sec				
Flexure Stresses	Dissipation Factor	Meets Initial Values (As Above)					
	Insulation Resistance	≥ Initial Value x 0.3	90 r	mm			
Solder	rability	≥ 95% of each terminal should be covered with fresh solder	Dip device in eutectic for 5.0 ± 0.9				
	Appearance	No defects, <25% leaching of either end terminal					
	Capacitance Variation	≤ ±7.5%	Dip device in eutectic solder at 260°C for 60 seconds. Store at room temperature for 24 ± 2 hours before measuring electrical properties.				
Resistance to Solder Heat	Dissipation Factor	Meets Initial Values (As Above)					
	Insulation Resistance	Meets Initial Values (As Above)	nours before measuring	g electrical properties.			
	Dielectric Strength	Meets Initial Values (As Above)					
	Appearance	No visual defects	Step 1: -55°C ± 2°	30 ± 3 minutes			
	Capacitance Variation	≤ ±7.5%	Step 2: Room Temp	≤ 3 minutes			
Thermal Shock	Dissipation Factor	Meets Initial Values (As Above)	Step 3: +125°C ± 2°	30 ± 3 minutes			
	Insulation Resistance	Meets Initial Values (As Above)	Step 4: Room Temp	≤ 3 minutes			
	Dielectric Strength	Meets Initial Values (As Above)	Repeat for 5 cycles 24 ± 2 hours at ro				
	Appearance	No visual defects					
	Capacitance Variation	≤ ±12.5%	Charge device with 1.5 r				
Load Life	Dissipation Factor	≤ Initial Value x 2.0 (See Above)	for 1000 hou				
	Insulation Resistance	≥ Initial Value x 0.3 (See Above)	Remove from test chamb temperature for 24 ± 2 h				
	Dielectric Strength	Meets Initial Values (As Above)					
	Appearance	No visual defects					
	Capacitance Variation	≤ ±12.5%	Store in a test chamber s 5% relative humidi	ty for 1000 hours			
Load Humidity	Dissipation Factor	≤ Initial Value x 2.0 (See Above)	(+48, -0) with rated	d voltage applied.			
	Insulation Resistance	≥ Initial Value x 0.3 (See Above)	Remove from chamber temperature an	d humidity for			
	Dielectric Strength	Meets Initial Values (As Above)	24 ± 2 hours before measuring.				



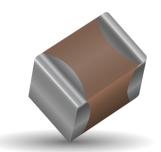
X8R - Capacitance Range

	SIZE	LD	03	LD	05	LD06		
	WVDC	25V	50V	25V	50V	25V	50V	
271	Cap 270	G	G					
331	(pF) 330	G	G	J	J			
471	470	G	G	J	J			
681	680	G	G	J	J			
102	1000	G	G	J	J	J	J	
152	1500	G	G	J	J	J	J	
182	1800	G	G	J	J	J	J	
222	2200	G	G	J	J	J	J	
272	2700	G	G	J	J	J	J	
332	3300	G	G	J	J	J	J	
392	3900	G	G	J	J	J	J	
472	4700	G	G	J	J	J	J	
562	5600	G	G	J	J	J	J	
682	6800	G	G	J	J	J	J	
822	Cap 8200	G	G	J	J	J	J	
103	(μF) 0.01	G	G	J	J	J	J	
123	0.012	G	G	J	J	J	J	
153	0.015	G	G	J	J	J	J	
183	0.018	G	G	J	J	J	J	
223	0.022	G	G	J	J	J	J	
273	0.027	G	G	J	J	J	J	
333	0.033	G	G	J	J	J	J	
393	0.039	G	G	J	J	J	J	
473	0.047	G	G	J	J	J	J	
563	0.056	G		N	N	М	M	
683	0.068	G		N	N	М	M	
823	0.082			N	N	М	М	
104	0.1			N	N	М	M	
124	0.12			N	N	М	M	
154	0.15			N	N	М	М	
184	0.18			N		М	M	
224	0.22			N		М	М	
274	0.27					М	М	
334	0.33					М	М	
394	0.39					М		
474	0.47					М		
684	0.68							
824	0.82							
105	1							
	WVDC	25V	50V	25V	50V	25V	50V	
	SIZE	LD	03	LD	05	LD	06	

Letter	Α	С	E	G	J	K	М	N	Р	Q	Х	Υ	Z
Max.	0.33	0.56	0.71	0.90	0.94	1.02	1.27	1.40	1.52	1.78	2.29	2.54	2.79
Thickness	(0.013)	(0.022)	(0.028)	(0.035)	(0.037)	(0.040)	(0.050)	(0.055)	(0.060)	(0.070)	(0.090)	(0.100)	(0.110)
			PAPER						EMBC	SSED			

X7R - General Specifications





KYOCERA AVX will support those customers for commercial and military Multilayer Ceramic Capacitors with a termination consisting of 5% minimum lead. This termination is indicated by the use of a "B" in the 12th position of the KYOCERA AVX Catalog Part Number. This fulfills KYOCERA AVX's commitment to providing a full range of products to our customers. KYOCERA AVX has provided in the following pages a full range of values that we are currently offering in this special "B" termination. Please contact the factory if you require additional information on our MLCC Tin/Lead Termination "B" products.

Not RoHS Compliant

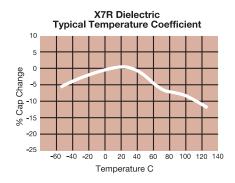
PART NUMBER (SEE PAGE 4 FOR COMPLETE PART NUMBER EXPLANATION)

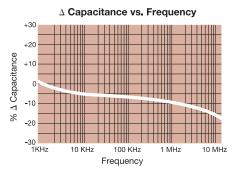
LD05	5	<u>c</u>	101	J	<u>A</u>	<u>B</u>	2	<u>A</u>
Size LD03 - 0603 LD04 - 0504* LD05 - 0805 LD06 - 1206 LD10 - 1210 LD12 - 1812 LD13 - 1825 LD14 - 2225 LD20 - 2220	Voltage 6.3V = 6 10V = Z 16V = Y 25V = 3 35V = D 50V = 5 100V = 1 200V = 2 500V = 7	Dielectric X7R = C	Capacitance Code (In pF) 2 Sig. Digits + Number of Zeros	Capacitance Tolerance B = ±.10 pF (<10pF) C = ±.25 pF (<10pF) D = ±.50 pF (<10pF) F = ±1% (≥ 10 pF) G = ±2% (≥ 10 pF) J = ±5% K = ±10% M = ±20%	Failure Rate A = Not Applicable	Terminations B = 5% min lead X = FLEXITERM® with 5% min lead** **X7R only	Packaging 2 = 7" Reel 4 = 13" Reel Contact Factory For Multiples*	Special Code A = Std. Product

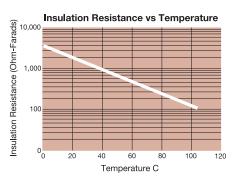
^{*}LD04 has the same CV ranges as LD03.

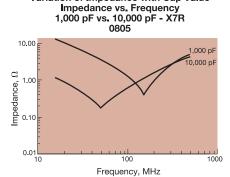
See FLEXITERM® section for CV options

NOTE: Contact factory for availability of Tolerance Options for Specific Part Numbers. Contact factory for non-specified capacitance values.

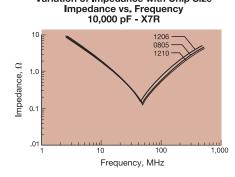




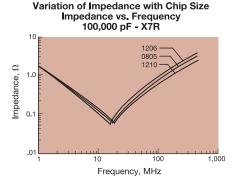




Variation of Impedance with Cap Value



Variation of Impedance with Chip Size







Parame	ter/Test	X7R Specification Limits	Measuring (Conditions
Operating Tem	perature Range	-55°C to +125°C	Temperature C	cle Chamber
Capac	itance	Within specified tolerance		
Dissipati	on Factor	\leq 10% for ≥ 50V DC rating \leq 12.5% for 25V DC rating \leq 12.5% for 25V and 16V DC rating \leq 12.5% for \leq 10V DC rating	Freq.: 1.0 k Voltage: 1.0\	
Insulation	Resistance	100,000MΩ or 1000MΩ - μ F, whichever is less	Charge device with 120 ± 5 secs @ roo	rated voltage for m temp/humidity
Dielectric	Strength	No breakdown or visual defects	Charge device with 250 1-5 seconds, w/charge limited to 50 Note: Charge device with for 500V (and discharge current mA (max) 150% of rated voltage
	Appearance	No defects	Deflection	n: 2mm
Resistance to	Capacitance Variation	≤ ±12%	Test Time: 3	
Flexure Stresses	Dissipation Factor	Meets Initial Values (As Above)		
	Insulation Resistance	≥ Initial Value x 0.3	90 n	nm —
Solder	ability	≥ 95% of each terminal should be covered with fresh solder	Dip device in eutectic for 5.0 ± 0.5	
	Appearance	No defects, <25% leaching of either end terminal		
	Capacitance Variation	≤ ±7.5%		
Resistance to Solder Heat	Dissipation Factor	Meets Initial Values (As Above)	Dip device in eutectic s seconds. Store at room	temperature for 24 ± 2
	Insulation Resistance	Meets Initial Values (As Above)	hours before measuring	j electrical properties.
	Dielectric Strength	Meets Initial Values (As Above)		
	Appearance	No visual defects	Step 1: -55°C ± 2°	30 ± 3 minutes
	Capacitance Variation	≤ ±7.5%	Step 2: Room Temp	≤ 3 minutes
Thermal Shock	Dissipation Factor	Meets Initial Values (As Above)	Step 3: +125°C ± 2°	30 ± 3 minutes
	Insulation Resistance	Meets Initial Values (As Above)	Step 4: Room Temp	≤ 3 minutes
	Dielectric Strength	Meets Initial Values (As Above)	Repeat for 5 cycles : 24 ± 2 hours at ro	and measure after om temperature
	Appearance	No visual defects		
	Capacitance Variation	≤ ±12.5%	Charge device with 1.5 r test chamber set	
Load Life	Dissipation Factor	≤ Initial Value x 2.0 (See Above)	for 1000 hou	
	Insulation Resistance	≥ Initial Value x 0.3 (See Above)	Remove from test chamb temperature for 24 ± 2 ho	
	Dielectric Strength	Meets Initial Values (As Above)		-
	Appearance	No visual defects		
	Capacitance Variation	≤ ±12.5%	Store in a test chamber s 5% relative humidit	
Load Humidity	Dissipation Factor	≤ Initial Value x 2.0 (See Above)	(+48, -0) with rated	voltage applied.
riumuity	Insulation Resistance	≥ Initial Value x 0.3 (See Above)	Remove from chamber temperature an	d humidity for
	Dielectric Strength	Meets Initial Values (As Above)	24 ± 2 hours befo	ore measuring.





PREFERRED SIZES ARE SHADED

						1																						
SIZE				02					LD03							LD05							LD					
Solderin		ŀ		//Wave	<u>e</u>				low/W							low/W							Reflow					
Packagi				aper					II Pap							7/EMB 01 ± 0.	ossed					Pa	per/Er	nboss £ 0.20	sea			
(L) Length	mm (in.)	(0	0.040 :	± 0.10 ± 0.00	4)			(0.06	50 ± 0. 53 ± 0.	.006)					(0.07	79 ± 0.	.008)					(0	.126 :	£ 0.00	8)			
W) Width	mm (in.)	(0		± 0.10 ± 0.00					31 ± 0. 32 ± 0.							25 ± 0. 49 ± 0.						(0	1.60 : : 0.063		8)			
(+) Tarmain al	mm		0.25 :	± 0.15				0.3	35 ± 0.	.15					0.5	50 ± 0.	.25						0.50 :	£ 0.25				
(t) Terminal	(in.)	(0	0.010 :	± 0.00	6)			$(0.0)^{\circ}$	14 ± 0.	.006)					(0.02	20 ± 0.	.010)					(0	0.020	£ 0.010	0)			
WVDC		10	16	25	50	6.3	10	16	25	50	100	200	6.3	10	16	25	50	100	200	6.3	10	16	25	50	100	200	500	
Сар	100																											
(pF)	150											ŀ					i	i										
(pi)	220				С							1						ŀ										
						_				_																	17	
	330				С					G	G	G		J	J	J	J	J	J								K	
	470				С					G	G	G		J	J	J	J	J	J								K	
	680				С					G	G	G		J	J	J	J	J	J								K	
	1000				С					G	G	G		J	J	J	J	J	J								K	
	1500				С					G	G			J	J	J	J	J	J		J	J	J	J	J	J	М	
	2200				С					G	G			J	J	J	J	J	J		J	J	J	J	J	J	М	
	3300			С	C					G	G			J	J	J	J	J	J		J	J	J	J	J	J	M	
	4700			C	C					G	G			Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ		Ĵ	Ĵ	Ĵ	Ĵ	Ĵ	J	М	
	6800		С	C						G	G			J	Ĵ	Ĵ	Ĵ	Ĵ	Ĵ		J	J	J	J	Ĵ	J	P	
Con	0.010		C	C	-					G	G			J	J	J		J	J		_	J	J	J	J	J	P	
Cap					1						G	ļ					J	-	-		J	-	-			-	Р	
(μF)	0.015		С				ļ		G	G				J	J	J	J	J	J		J	J	J	J	J	М		
	0.022		С						G	G				J	J	J	J	J	N		J	J	J	J	J	М		
1	0.033		С						G	G				J	J	J	J	N			J	J	J	J	J	М		
	0.047							G	G	G				J	J	J	J	N			J	J	J	J	J	M		
	0.068							G	G	G				J	J	J	J	N			J	J	J	J	J	P		
	0.10	С		C*			G	G	G	G				J	J	J	J	N			J	J	J	J	Р	Р		
	0.15				1	G	G							J	J	J	N	N			J	J	J	J	Q			
	0.22					G	G							J	Ĵ	N	N	N			J	J	J	J	Q			
	0.33					J	J							N	N	N	N	N			J	J	M	P	Q			
	0.33								J*					N	N	N	N	N			M	M	M	Р	Q			
	0.47								J					N	N	N	IN	IN			M	M	Q	Q	Q			
				_	-	-	1+	1+		_	-					N*									_			
	1.0						J*	J*						N	N	IN^					M	M	Q	Q	Q			
	1.5															D.					Р	Q	Q					
	2.2					J*										P*					Q	Q	Q					
	3.3																											
	4.7													P*	P*					Q* Q* Q*								
	10												P*	P							Q*	Q*	Q					
	22																			Q*								
	47					1					1					1		l										
	100					1																						
WVDC		10	16	25	50	6.3	10	16	25	50	100	200	6.3	10	16	25	50	100	200	6.3	10	16	25	50	100	200	500	
SIZE				02					LD03							LD05							LD					
UIZE																												

Letter	Α	С	Е	G	J	K	М	N	Р	Q	Х	Υ	Z
Max.	0.33	0.56	0.71	0.90	0.94	1.02	1.27	1.40	1.52	1.78	2.29	2.54	2.79
Thickness	(0.013)	(0.022)	(0.028)	(0.035)	(0.037)	(0.040)	(0.050)	(0.055)	(0.060)	(0.070)	(0.090)	(0.100)	(0.110)
			PAPER						EMBC	SSED			

= Under Development





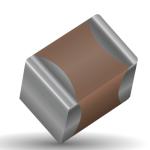
PREFERRED SIZES ARE SHADED

SIZE					LD10					LD	12		LD	13			20			14
Soldering	g			R	eflow On	ly				Reflov	v Only		Reflo	w Only		Reflov	v Only		Reflo	w Only
Packagin	g			Pape	er/Embo	ssed				All Emb	ossed		All Em	bossed		All Eml	bossed		All Em	bossed
(L) Length	mm				.20 + 0.2					4.50 ±				± 0.30			± 0.50		1	± 0.25
(L) Length	(in.)				26 ± 0.0					(0.177 ±				± 0.012)		(0.224 :				± 0.010)
W) Width	mm				.50 ± 0.2					3.20 ±				± 0.40			± 0.40			± 0.25
W) Width	(in.)				98 ± 0.0					(0.126 ±				± 0.016)		(0.197 :				± 0.010)
(t) Terminal	mm				.50 ± 0.2					0.61 ±				± 0.36		0.64 :				± 0.39
* /	(in.)	10			20 ± 0.0		000			(0.024 ±				± 0.014)			± 0.015)			± 0.015)
WVDC	100	10	16	25	50	100	200	500	50	100	200	500	50	100	25	50	100	200	50	100
Cap	100																			
(pF)	150 220																		Į	
	330												-			†			W	
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	1500	J	J	J	J	J	J	М										1		
	2200	J	J	J	J	J	J	м									. '			
	3300	J	J	J	J	J	J	М												
	4700	J	J	J	J	J	J	М												
	6800	J	J	J	J	J	J	М												
	0.010	J	J	J	J	٦	J	М	K	K	K	K	М	М		X	Х	X	М	Р
(I:)	0.015	J	J	J	J	J	J	Р	K	K	K	Р	М	М		Х	X	X	М	Р
	0.022	J	J	J	J	J	J	Q	K	K	K	Р	М	М		Х	X	Х	М	Р
	0.033	J	J	J	J	J	J	Q	K	K	K	Х	M	М		Х	Х	Х	М	Р
	0.047	J	J	J	J	J	J		K	K	K	Z	М	М		Х	X	Х	М	P
	0.068	J	J	J	J	J	М		K	K	K	Z	М	М		Х	X	X	М	Р
	0.10	J	J	J	J	J	M		K	K	K	Z	M	M		X	X	X	M	P
	0.15	J	J	J	J	M	Z		K	K	P P		M	M		X	X	X	M	P P
	0.22	J	J	J	J	P	Z		K	K	X		M	M		X	X	X	M	P
	0.33	J M	J M	M	J M	Q Q			K K	M P	^		M M	M		X	X	X	M	P
	0.47	M	M	P IVI	X	X			M	Q			M	P		X	X	^	M	P
	1.0	N	N	P	X	Z			M	X			M	P		X	X		M	P
	1.5	N	N	z	Ž	Z			Z	Ž			M			X	X		M	X
	2.2	X	X	Z	Z	Z			Z	Z						X	x		M	,
	3.3	X	X	Z	Z				Z							X	Z			
	4.7	X	X	Z	Z				Z	Z						X	Z			
	10	Z	Z	Z	Z											Z	Z			
	22	Z	Z												Z					
	47	Z																		
	100																			
WVDC		10	16	25	50	100	200	500	50	100	200	500	50	100	25	50	100	200	50	100
SIZE					LD10					LD	12		LD	13		LD	20			14

Letter	Α	С	Е	G	J	K	М	N	Р	Q	Χ	Υ	Z
Max.	0.33	0.56	0.71	0.90	0.94	1.02	1.27	1.40	1.52	1.78	2.29	2.54	2.79
Thickness	(0.013)	(0.022)	(0.028)	(0.035)	(0.037)	(0.040)	(0.050)	(0.055)	(0.060)	(0.070)	(0.090)	(0.100)	(0.110)
			PAPER						EMBC	SSED			

X5R - General Specifications





KYOCERA AVX will support those customers for commercial and military Multilayer Ceramic Capacitors with a termination consisting of 5% minimum lead. This termination is indicated by the use of a "B" in the 12th position of the KYOCERA AVX Catalog Part Number. This fulfills KYOCERA AVX's commitment to providing a full range of products to our customers. KYOCERA AVX has provided in the following pages a full range of values that we are currently offering in this special "B" termination. Please contact the factory if you require additional information on our MLCC Tin/Lead Termination "B" products.

Not RoHS Compliant

PART NUMBER (SEE PAGE 4 FOR COMPLETE PART NUMBER EXPLANATION)

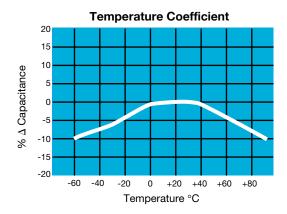
LD05	5	D	101	<u> </u>	Т	<u>B</u>	2	<u>A</u>
Size LD02 - 0402 LD03 - 0603 LD04 - 0504* LD05 - 0805 LD06 - 1206 LD10 - 1210 LD12 - 1812 LD13 - 1825 LD14 - 2225 LD20 - 2220	Voltage 6.3V = 6 10V = Z 16V = Y 25V = 3 35V = D 50V = 5 100V = 1 200V = 2 500V = 7	Dielectric X5R = D	Capacitance Code (In pF) 2 Sig. Digits + Number of Zeros	Capacitance Tolerance B = ±.10 pF (<10pF) C = ±.25 pF (<10pF) D = ±.50 pF (<10pF) F = ±1% (≥ 10 pF) G = ±2% (≥ 10 pF) J = ±5% K = ±10% M = ±20%	Failure Rate A = Not Applicable	B = 5% min lead X = FLEXITERM® with 5% min lead** **X7R only	Packaging 2 = 7" Reel 4 = 13" Reel Contact Factory For Multiples*	Special Code A = Std. Product

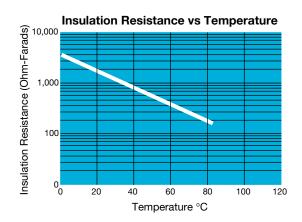
^{*}LD04 has the same CV ranges as LD03.

NOTE: Contact factory for availability of Tolerance Options for Specific Part Numbers. Contact factory for non-specified capacitance values.

See FLEXITERM® section for CV options

TYPICAL ELECTRICAL CHARACTERISTICS









Parame	ter/Test	X5R Specification Limits	Measuring (Conditions
Operating Tem	perature Range	-55°C to +85°C	Temperature C	ycle Chamber
Capac	itance	Within specified tolerance		
Dissipati	on Factor	≤ 2.5% for ≥ 50V DC rating ≤ 3.0% for 25V, 35V DC rating ≤ 12.5% Max. for 16V DC rating and lower Contact Factory for DF by PN	Freq.: 1.0 k Voltage: 1.0 For Cap > 10 µF, 0	Vrms ± .2V
Insulation	Resistance	10,000MΩ or 500MΩ - μF, whichever is less	Charge device with 120 ± 5 secs @ roo	
Dielectric	Strength	No breakdown or visual defects	Charge device with 250 1-5 seconds, w/charge limited to 50	and discharge current
	Appearance	No defects	Deflectio	n: 2mm
Resistance to	Capacitance Variation	≤ ±12%	Test Time: 3	
Flexure Stresses	Dissipation Factor	Meets Initial Values (As Above)		
	Insulation Resistance	≥ Initial Value x 0.3	90 r	
Solder	rability	≥ 95% of each terminal should be covered with fresh solder	Dip device in eutectic for 5.0 ± 0.9	
	Appearance	No defects, <25% leaching of either end terminal		
	Capacitance Variation	≤ ±7.5%		
Resistance to Solder Heat	Dissipation Factor	Meets Initial Values (As Above)	Dip device in eutectic s seconds. Store at room	temperature for 24 ± 2
	Insulation Resistance	Meets Initial Values (As Above)	hours before measuring	g electrical properties.
	Dielectric Strength	Meets Initial Values (As Above)		
	Appearance	No visual defects	Step 1: -55°C ± 2°	30 ± 3 minutes
	Capacitance Variation	≤ ±7.5%	Step 2: Room Temp	≤ 3 minutes
Thermal Shock	Dissipation Factor	Meets Initial Values (As Above)	Step 3: +85°C ± 2°	30 ± 3 minutes
	Insulation Resistance	Meets Initial Values (As Above)	Step 4: Room Temp	≤ 3 minutes
	Dielectric Strength	Meets Initial Values (As Above)	Repeat for 5 cycles 24 ± 2 hours at ro	and measure after om temperature
	Appearance	No visual defects		
	Capacitance Variation	≤ ±12.5%	Charge device with 1.5 chamber set at 85°C: (+48, -0). Note: Contac	± 2°C for 1000 hours
Load Life	Dissipation Factor	≤ Initial Value x 2.0 (See Above)	specification part numl < 1.5X rate	pers that are tested at
	Insulation Resistance	≥ Initial Value x 0.3 (See Above)	Remove from test chamb	
	Dielectric Strength	Meets Initial Values (As Above)	temperature for 24 ± 2 h	ours betore measuring.
	Appearance	No visual defects		
	Capacitance Variation	≤ ±12.5%	Store in a test chamber s 5% relative humidi	ty for 1000 hours
Load Humidity	Dissipation Factor	≤ Initial Value x 2.0 (See Above)	(+48, -0) with rated	
,	Insulation Resistance	≥ Initial Value x 0.3 (See Above)	Remove from chamber temperature an 24 ± 2 hours bef	d humidity for
	Appearance Capacitance Variation Dissipation Factor Insulation Resistance Dielectric Strength Appearance Capacitance Variation Dissipation Factor Insulation Resistance Dielectric Strength Appearance Capacitance Variation Dissipation Factor Insulation Resistance Dielectric Strength Appearance Capacitance Variation Dissipation Factor Insulation Factor Insulation	Meets Initial Values (As Above)	2 , 2 2 110013 001	o. o . mododi mig.





PREFERRED SIZES ARE SHADED

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Letter	Α	С	Е	G	J	K	М	N	Р	Q	Х	Υ	Z
Max.	0.33	0.56	0.71	0.90	0.94	1.02	1.27	1.40	1.52	1.78	2.29	2.54	2.79
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			PAPER						EMBC	SSED			

^{*}Optional Specifications - Contact factory

NOTE: Contact factory for non-specified capacitance values

单击下面可查看定价,库存,交付和生命周期等信息

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