



ROADMAP MLCC
2026



Manufacturer	Dielectricum/ Ceramic	Use	Application	Feature	Page
TAIYO YUDEN	NP0 / COG	Consumer	General Electronic Equipment		4
	X7R / S,X5R	Consumer	General Electronic Equipment		5
	X7R / S,X5R	Consumer	General Electronic Equipment	ultra small sizes	7
	NP0 / COG	Industrial	Telecommunications Infrastructure and Industrial Equipment		8
	X7R / S,X5R	Industrial	Telecommunications Infrastructure and Industrial Equipment		9
	X7R / S,X5R	Industrial	Telecommunications Infrastructure and Industrial Equipment	Soft Termination	11
	NP0 / COG	Automotive	Body & Chassis, Infotainment	AEC Q 200	12
	X7R / S,X5R	Automotive	Body & Chassis, Infotainment	AEC-Q 200	13
	X7R / S,X5R	Automotive	Body & Chassis, Infotainment	AEC-Q 200, Soft Termination	15
	X7R / S,X5R	Automotive High Reliability	Powertrain & Safety Applications	AEC-Q 200	16
	X7R / S,X5R	Automotive High Reliability	Powertrain & Safety Applications	AEC-Q 200, Soft Termination	18
	X7R / S,X5R	Automotive X8L 150°C	Powertrain, Safety, Body, Chassis, Infotainment, Medical, Industrial	AEC-Q 200	19
HOLYSTONE	NP0 / X7R / S, X5R	Consumer & Industrial	High Voltage up to 5 KV	Arc Prevention	20
	NP0 / X7R	Consumer & Industrial	Safety Capacitors X/Y Certified	Arc Prevention, Soft Termination	21
	NP0 / X7R	Automotive	High Voltage up to 3 KV	AEC-Q 200, Soft Termination	26
	X7R	Automotive	Safety Capacitors X/Y Certified	AEC-Q 200, Soft Termination, Arc Prevention	30

Case Size inch (mm)	Capacitance	1R0	2R0	3R0	4R0	5R0	6R0	7R0	8R0	9R0	100	120	150	180	220	270	330	390	470	560	680	820	101	221	241	271	331
	Voltage	1pF	2pF	3pF	4pF	5pF	6pF	7pF	8pF	9pF	10pF	12pF	15pF	18pF	22pF	27pF	33pF	39pF	47pF	56pF	68pF	82pF	100pF	220pF	240pF	270pF	330pF
008004 (0201)	10																										
	16																										
	25																										
	50																										

01005 (0402)	10																										
	16																										
	25																										
	50																										

Case Size inch (mm)	Capacitance	200	300	390	470	560	680	750	820	910	101	151	201	221	271	301	331	391	471	561	681	821	102
	Voltage	20pF	33pF	39pF	47pF	56pF	68pF	75pF	82pF	91pF	100pF	150pF	200pF	220pF	270pF	300pF	330pF	390pF	470pF	560pF	680pF	820pF	1nF
0201 (0603)	16																						
	25																						
	50																						
	100																						

0402 (1005)	16																						
	25																						
	50																						
	100																						

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	474	105	225	475	106	226	476	107	157	227	337	477	108
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF	22µF	47µF	100µF	150µF	220µF	330µF	470µF	1mF
0201 (0603)	2,5											X6S	X5R									
	4									X6S	X6S	X5R	X5R									
	6,3							X6S	X6S	X6S	X6S											
	10					X5R	X5R	X6S	X6S	X6S	X5R											
	16		X7R	X7R	X7R	X7R	X5R	X6S	X5R	X6S	X5R											
	25		X7R	X7R	X7R	X5R		X6S														
	35							X5R														
	50	X7R	X5R	X5R	X5R																	
0402 (1005)	2,5														X6S	coming soon	coming soon					
	4									X5R	X5R	X5R	X6S	X6S	X5R	coming soon						
	6,3								X7R	X7R	X5R	X6S	X6S	X6S								
	10							X5R	X7R	X7R	X6S	X6S	X5R									
	16					X7R	X7R	X7R	X7R	X5R	X6S	X6S										
	25				X5R	X7R	X7R	X7R	X7R	X5R	X6S	X5R										
	35							X5R			X6S											
	50		X7R	X7R	X7R	X7R	X7R	X7R	X5R	X5R	X5R											
	100	X7R	X7R	X7R																		
0603 (1608)	2,5														X6S	coming soon		coming soon				
	4														X6S	X6S	coming soon					
	6,3										X5R	X7R	X7R	X6S	X6S	X5R						
	10										X6S	X7R	X6S	X6S	X5R							
	16									X7R	X7R	X7R	X6S	X6S								
	25									X7R	X7R	X6S	X5R	X5R								
	35												X5R									
	50							X7R	X7R	X7R	X5R											
	100	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S													
0805 (2012)	2,5																X5R		coming soon			
	4														X6S	X6S	X6S		coming soon			
	6,3																					
	10										X7R	X7R	X7R	X7R	X6S	X5R	coming soon					
	16									X7R	X7R	X7R	X7R	X7R	X6S	coming soon						
	25									X5R	X5R	X7R	X7R	X6S	X5R							
	35										X7R	X5R	X5R	X5R								
	50							X7R	X7R	X7R	X7R	X7R	X5R	coming soon								
	100				X7R	X7R	X7R	X7R	X7R	X7S	X5R											
	250	X7R	X7R	X7R	X7R	X7R																

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	474	105	225	475	106	226	476	107	157	227	337	477	108
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF	22µF	47µF	100µF	150µF	220µF	330µF	470µF	1mF
1206 (3216)	2,5																		X6S			
	4															X7S	X6S	X5R	X6S			
	6,3													X5R	X5R	X7S	X5R		X5R			
	10													X5R	X7R	X7R	X6S	X5R		coming soon		
	16											X5R	X7R	X7R	X7R	X5R						
	25										X5R	X5R	X7R	X7R	X6S							
	35												X5R	X7R								
	50										X5R	X7R	X7R	X5R								
	100						X7R	X7R	X7R	X7R	X7R	X7S										
	250						X7R	X7R														
	630	X7R	X7R	X7R	X7R	X7R	X7R															
1210 (3225)	2,5																		X6S	X6S		
	4																	X6S	X6S	X6S	coming soon	
	6,3														X5R	X7R	X7S	X5R	X5R	X5R		
	10												X5R	X7R	X5R	X7R	X6S					
	16												X7R	X7R	X7R	X6S	X5R					
	25												X7R	X7R	X7R	X5R						
	35											X5R	X5R	X5R	X5R							
	50										X5R		X7R	X7R								
	100						X7R	X7R	X7R		X7R	X7R	X7S									
	250						X7R	X7R	X7R													
	630					X7R	X7R															
1812 (4532)	2,5																				X6S	
	4																				X5R	
	100									X7R	X7R	X7R										
	250							X7R	X7R	X7R												
	630						X7R	X7R														
	2000		X7R	X7R																		

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	105
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	1uF
008004 (0201)	2,5						coming soon	coming soon		
	4					X5R	coming soon			
	6,3		X5R	X5R	X5R					
	16	X5R								
01005 (0402)	2,5								X6S	coming soon
	4				X6S	X6T	X6S	X5R	X5R	
	6,3		X5R	X5R	X6S	X5R	X5R	X5R	X5R	
	10	X7R	X6S	X6S	X6S			X5R		
	16	X7R	X5R	X5R	X5R					

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C – Permissible capacitance variation over the specified temperature range: ±15% (R) / ±22% (S).

Case Size inch (mm)	Capacitance	100	200	300	390	470	560	680	750	820	910	101	151	201	221	271	301	331	391	471	561	681	821	102
	Voltage	10pF	20pF	33pF	39pF	47pF	56pF	68pF	75pF	82pF	91pF	100pF	150pF	200pF	220pF	270pF	300pF	330pF	390pF	470pF	560pF	680pF	820pF	1nF
0201 (0603)	16																							
	25																							
	50																							
	100																							
0402 (1005)	16																							
	25																							
	50																							
	250																							
0603 (1608)	50																							
	100																							
	250																							
0805 (2012)	50																							
	100																							
	250																							

COG / CG / COH – Exhibits stable capacitance with temperature and voltage over the specified range of -55°C to +125°C.

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	474	105	225	475	106	226	476	107	227
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF	22µF	47µF	100 µF	220 µF
0201 (0603)	4																	
	6,3					X7T	X7T	X7T										
	10	X7R	X7R	X7R	X7R			X7S										
	16	X7R	X7R															
	25	X7R	X7R															
0402 (1005)	4									X7R		X5R	X5R					
	6,3							X7R	X7R	X7R	X7T	X7T	X5R					
	10						X7R	X7R	X7R	X5R	X7T	X5R						
	16				X7R	X7R	X7R	X7R	X7R	X6S	X5R							
	25			X7R	X7R	X7R	X7R	X7R	X5R	X5R								
	50	X7R	X7R	X7R	X7R	X7R	X7R	X7R										
	100	X7R	X7R	X7R	X7R													
0603 (1608)	4													X5R	X5R			
	6,3										X7R	X7R	X6S	X7T				
	10									X7R	X7R	X7T	X5R	X5R				
	16								X7R	X7R	X7R	X5R	X5R					
	25						X7R	X7R	X7R	X7R	X7R	X5R						
	35						X7R	X7R	X7R	X7R	X7R							
	50	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S	X5R	X5R							
	100	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S									
0805 (2012)	4														X7T	X6S		
	6,3												X7R	X7R	X7T			
	10											X7R	X7R	X7R				
	16										X7R	X7R	X7R	X5R				
	25									X7R	X7R	X7R	X7S	X5R				
	35										X7R	X5R						
	50				X7R	X7R	X7R	X7R	X7R	X7S	X7R							
	100						X7R	X7R	X7R	X7S	X7S							
	250	X7R	X7R	X7R	X7R	X7R	X7R	X7R										

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	474	105	225	475	106	226	476	107	227
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF	22µF	47µF	100 µF	220 µF
1206 (3216)	4														X7R	X7S	X5R	
	6,3														X7R	X5R	X5R	
	10													X7R	X7R			
	16												X7R	X7R	X5R			
	25												X7R	X7R				
	35											X7R	X7R	X7R				
	50										X7R	X7R	X7S					
	100								X7R	X7R	X7R	X7S						
	250					X7R	X7R	X7R										
	630	X7R	X7R	X7R	X7R	X7R	X7R											
1210 (3225)	4																X6S	
	6,3															X7R	X6S	
	10														X7R	X5R	X5R	
	16														X7R	X5R		
	25													X7R	X7R			
	35													X7R				
	50												X7R	X7R				
	100											X7R	X7S					
	250						X7R	X7R	X7R									
	630					X7R	X7R											
1812 (4532)	100																	
	250							X7R	X7R	X7R								
	630						X7R	X7R										
	1KV																	
	2KV																	

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C – Capacitance variation within the specified temperature range: ±15% (R), ±22% (S), or +22% / -33% (T)

* Additional intermediate capacitance values available.

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	474	105	225	475	106	226	476		
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF	22µF	47µF	100µF	220µF
0603 (1608)	25						X7R	X7R	X7R	X7R	X7R							
	35						X7R	X7R	X7R	X7R	X7R							
	50	X7R	X7R	X7R	X7R	X7R	X7R	X7R										
	100	X7R	X7R	X7R	X7R	X7R	X7R	X7R										
0805 (2012)	6,3													X7R				
	10																	
	16											X7R	X7R					
	25											X7R						
	35										X7R							
	50				X7R	X7R	X7R	X7R	X7R	X7S	X7R							
	100	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S	X7S							
	250	X7R	X7R	X7R	X7R	X7R												
1206 (3216)	10														X7R			
	16												X7R	X7R				
	25									X7R			X7R	X7R				
	35									X7R			X7R	X7R	X7R			
	50						X7R	X7R	X7R	X7R	X7R	X7R	X7S					
	100	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S						
	250	X7R	X7R	X7R	X7R	X7R	X7R	X7R										
	630	X7R	X7R	X7R	X7R	X7R												
1210 (3225)	6,3															X7R		
	10																	
	16														X7R			
	25												X7R	X7R				
	35												X7R	X7R				
	50											X7R	X7R	X7R				
	100					X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S					
	250					X7R	X7R	X7R	X7R									
	630					X7R	X7R											

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C – Over the specified temperature range, a capacitance change of R = ±15%, S = ±22%, and T = -33% / +22% is permissible.

* Additional intermediate capacitance values available.

Case Size inch (mm)	Capacitance	100	200	300	390	470	560	680	750	820	910	111	151	201	221	271	301	331	391	471	561	681	821	102
	Voltage	10pF	20pF	33pF	39pF	47pF	56pF	68pF	75pF	82pF	91pF	110pF	150pF	200pF	220pF	270pF	300pF	330pF	390pF	470pF	560pF	680pF	820pF	1nF
0201 (0603)	16																							
	25																							
	50																							
	100																							
0402 (1005)	16																							
	25																							
	50																							
	250																							
0603 (1608)	50																							
	100																							
	250																							
0805 (2012)	50																							
	100																							
	250																							

COG / CG / COH – Exhibits stable capacitance with temperature and voltage over the specified range of –55°C to +125°C.

* Additional intermediate capacitance values available.

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	474	105	225	475	106	226	476	107	
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF	22µF	47µF	100 µF	200 µF
0201 (0603)	4																	
	6,3					X7T	X7T	X7T										
	10	X7R	X7R	X7R	X7R			X6S										
	16	X7R	X7R															
	25	X7R	X7R															
0402 (1005)	4									X7R		X5R	X5R					
	6,3							X7R	X7R	X7R	X7T	X7T	X5R					
	10						X7R	X7R	X7R	X5R	X5R	X5R						
	16				X7R	X7R	X7R	X7R	X7R	X5R	X5R							
	25			X7R	X7R	X7R	X7R	X7R	X5R	X5R								
	50	X7R	X7R	X7R	X7R	X7R	X7R	X7R										
	100	X7R	X7R	X7R	X7R													
0603 (1608)	4													X5R	X5R			
	6,3										X7R	X7R	X7T	X7T				
	10									X7R	X7R	X7T	X7T	X5R				
	16								X7R	X7R	X7R	X5R	X5R					
	25								X7R	X7R	X7R	X5R						
	35								X7R	X7R	X7R							
	50								X7R	X5R	X5R							
	100	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S									
0805 (2012)	4,0														X7T	X6S		
	6,3												X7R	X7R	X7T			
	10											X7R	X7R	X7R				
	16										X7R	X7R	X7R	X7T				
	25								X7R	X7R	X7R	X7S	X5R					
	35									X7R	X5R							
	50						X7R	X7R	X7R	X7S	X7R							
	100						X7R	X7R	X7R	X7S	X7S							
	250	X7R	X7R	X7R	X7R	X7R	X7R											

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	474	105	225	475	106	226	476	107
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF	22µF	47µF	100 µF
1206 (3216)	4														X7R	X7S	
	6,3														X7R	X5R	
	10													X7R	X5R		
	16												X7R	X7R	X5R		
	25												X7R	X7R			
	35											X7R	X7R	X5R			
	50										X7R	X7R	X7S				
	100								X7R	X7R	X7R	X7S					
	250					X7R	X7R	X7R									
	630	X7R	X7R	X7R	X7R	X7R	X7R										
1210 (3225)	6,3															X7R	
	10														X7R	X5R	
	16														X7R	X5R	
	25													X7R	X7R		
	35													X7R			
	50												X7R	X7R			
	100											X7R	X7S				
	250						X7R	X7R	X7R								
	630					X7R	X7R										
1812 (4532)	100																
	250							X7R	X7R	X7R							
	630						X7R	X7R									

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C – Over the specified temperature range, a capacitance change of ±15% (R), ±22% (S), or +22% to -33% (T) is permissible.

* Additional intermediate capacitance values available.

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	474	105	225	475	106	226	476		
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF	22µF	47µF	100µF	200µF
0603 (1608)	25						X7R	X7R	X7R	X7R	X7R							
	35						X7R	X7R	X7R	X7R	X7R							
	50	X7R	X7R	X7R	X7R	X7R	X7R	X7R										
	100	X7R	X7R	X7R	X7R	X7R	X7R	X7R										
0805 (2012)	6,3													X7R				
	10																	
	16											X7R	X7R					
	25											X7R						
	35										X7R							
	50				X7R	X7R	X7R	X7R	X7R	X7S	X7R							
	100	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S	X7S							
	250	X7R	X7R	X7R	X7R	X7R												
1206 (3216)	10														X7R			
	16												X7R	X7R				
	25									X7R			X7R	X7R				
	35									X7R		X7R	X7R	X7R				
	50						X7R	X7R	X7R	X7R	X7R	X7R	X7S					
	100	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S						
	250	X7R	X7R	X7R	X7R	X7R	X7R	X7R										
	630	X7R	X7R	X7R	X7R	X7R												
1210 (3225)	6,3															X7R		
	10																	
	16														X7R			
	25												X7R	X7R				
	35												X7R	X7R				
	50											X7R	X7R	X7R				
	100					X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7S					
	250					X7R	X7R	X7R	X7R									
	630					X7R	X7R											

X = -55°C, 6 = +105°C, 7 = +125°C – Over the specified temperature range, a capacitance change of ±15% (R) / ±22% (S) is permissible.

* Additional intermediate capacitance values available.

Case Size inch (mm)	Capacitance	102	152	222	332	472	103	223	333	473	104	224	474	105	225	475	106	226	476	107
	Voltage	1nF	1.5nF	2.2nF	3.3nF	4.7nF	10nF	22nF	33nF	47nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF	22µF	47µF	100µF
0201 (0603)	4										X7T									
	6,3							X7T	X7T	X7T	X7T									
	10	X7R	X7R	X7R	X7R	X7R	X7R				X7S									
	16	X7R	X7R	X7R	X7R															
	25	X7R	X7R	X7R	X7R		X7R													
	50	X7R		X7R																
0402 (1005)	4																			
	6,3			X7T							X8L			X7T						
	10	X7R		X7R		X7R	X7R	X7R	X8L	X8L	X7R			X7T						
	16	X7R		X7R		X7R	X7R	X8L		X7R	X7R									
	25	X7R		X7R		X7R	X8L	X7R		X7R	X7R	X7S								
	50	X8L	X8L	X8L	X8L	X8L	X7R	X7R	X7R	X7R	X7R									
0603 (1608)	4																			
	6,3											X8L	X8L		X7R	X7T				
	10							X7R		X7R	X7R	X7R	X7R	X7R	X7T	X7T				
	16							X7R		X7R	X7R	X7R	X7R	X7R						
	25							X7R		X7R	X7R	X7R	X7R							
	50	X8L	X8L	X8L	X8L	X8L	X8L	X8L	X8L	X8L	X8L	X7S					X8L	X8L		
0603 (1608)	100	X8L	X8L	X8L	X8L	X8L	X8L	X7R	X7R	X7R	X7R									

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C, 8 = +150°C – Capacitance variation within the specified temperature range:
 ±15% (R), ±22% (S), +22% to -33% (T); for L characteristics, ±15% up to 125°C and -15% to -22% from 125°C to 150°C.

* Additional intermediate capacitance values available.

Case Size inch (mm)	Capacitance	102	152	222	332	472	103	223	333	473	104	224	474	105	225	475	106	226	476	107
	Voltage	1nF	1.5nF	2.2nF	3.3nF	4.7nF	10nF	22nF	33nF	47nF	100nF	220nF	470nF	1μF	2.2μF	4.7μF	10μF	22μF	47μF	100μF
0805 (2012)	4																			
	6,3																X7R			
	10									X7R	X7R	X7R	X8L	X7R	X7R	X7R				
	16									X7R	X7R	X7R	X7R	X7R	X7R	X7R	X7T			
	25						X7R	X7R		X8L	X8L	X8L	X7R	X7R	X7R	X7S				
	50						X8L	X8L		X7R	X7R	X8L	X7S	X7R						
	100						X7R	X7R		X7R	X7R	X7R	X7S	X7S						
	250																			
1206 (3216)	4																X7R			
	6,3																X7R			
	10											X7R	X7R	X7R	X7R	X7R	X7R			
	16											X7R	X7R	X7R	X7R	X7R	X7R			
	25										X7R	X8L	X8L	X8L	X7R	X7R				
	50	X7R		X7R		X7R	X7R				X7R	X7R	X7R	X8L	X7S	X7S				
	100	X7R		X7R		X7R	X7R				X7R	X7R	X7R	X7R	X7S					
	250																			
1210 (3225)	6,3																X7R	X7R		
	10											X7R	X7R	X7R	X7R	X7R	X7R	X7R		
	16											X7R	X7R	X7R	X7R	X7R	X7R			
	25											X8L	X8L	X8L	X7R	X7R	X7R			
	50							X7R		X7R	X7R	X7R	X7R	X7R	X8L	X7R	X7S			
	100							X7R		X7R	X7R	X7R			X7R	X7S				
	250																			

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C, 8 = +150°C – Over the specified temperature range, a capacitance change of ±15% (R), ±22% (S), +22% to -33% (T), or up to ±15% to -22% (L) is permissible; for L characteristics, ±15% applies up to 125°C and -15% to -22% from 125°C to 150°C.

* Additional intermediate capacitance values available.

Case Size inch (mm)	Capacitance	102	222	472	103	223	473	104	224	474	105	225	475	106	226	476	107
	Voltage	1nF	2.2nF	4.7nF	10nF	22nF	47nF	100nF	220nF	470nF	1μF	2.2μF	4.7μF	10μF	22μF	47μF	100μF
0603 (1608)	10								X7R	X8L	X7R						
	16								X7R	X7R	X7R						
	25								X7R	X7R	X7R						
	50						X7R	X7R	X7S								
	100						X7R	X7R									
1206 (3216)	10										X7R						
	16										X7R						
	25										X7R						
	50								X7R		X7R						
	100								X7R		X7R						

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C, 8 = +150°C – Over the specified temperature range, a capacitance change of ±15% (R), ±22% (S), +22% to -33% (T), or for L characteristics: ±15% up to 125°C and -15% to -22% from 125°C to 150°C is permissible.

Case Size inch (mm)	Capacitance	102	152	222	332	472	682	103	153	223	333	473	683	104	224	474	105	225	475	106
	Voltage	1nF	1.5nF	2.2nF	3.3nF	4.7nF	6.8nF	10nF	15nF	22nF	33nF	47nF	68nF	100nF	220nF	470nF	1µF	2.2µF	4.7µF	10µF
0402 (1005)	6,3												X8L	X8L						
	10										X8L	X8L								
	16								X8L	X8L										
	25						X8L	X8L												
	50	X8L	X8L	X8L	X8L	X8L														
	100	X8L																		
0603 (1608)	6,3													X8L	X8L					
	10																			
	16																			
	25																			
	50	X8L	X8L	X8L	X8L	X8L	X8L	X8L	X8L	X8L	X8L	X8L		X8L						
	100	X8L	X8L	X8L	X8L	X8L	X8L	X8L												
0805 (2012)	6,3																			
	10															X8L				
	16																			
	25											X8L		X8L	X8L					
	50							X8L		X8L					X8L					
1206 (3216)	25													X8L	X8L	X8L				
	50															X8L				
1210 (3225)	25													X8L	X8L	X8L				
	50																X8L			

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C, 8 = +150°C – Over the specified temperature range, a capacitance change of ±15% (R), ±22% (S), +22% to -33% (T), or for L characteristics: ±15% up to 125°C and +15% to -22% up to 150°C is permissible.

Case Size inch (mm)	Voltage	6,3 V	10 V	16 V	25 V	35 V	50 V	100 V	200 V	250 V	500 V	630 V	1 KV	2 KV	3 KV	4 KV	5 KV
	Dielectric																
0201 (0603)	NP0			100 pF	100 pF												
	X5R	4.7 µF	1 µF														
	X7R	100 nF		3.9 nF	2.2 nF		10 nF	1 nF									
0402 (1005)	NP0						1 nF										
	X5R	22 µF	22 µF	4.7 µF	2.2 µF	2.2 µF											
	X7R	1 µF	100 nF	470 nF	220 nF		100 nF	10 nF		100 pF							
0603 (1608)	NP0			3.9 nF	3.9 nF		3.9 nF	3.9 nF	560 pF	560 pF							
	X5R	47 µF	22 µF	10 µF	10 µF	10 µF	2.2 µF										
	X7R	4.7 µF	4.7 µF	1 µF	1 µF		1 µF	220 nF	10 nF	47 nF							
0805 (2012)	NP0	22 nF	22 nF	22 nF	22 nF	22 nF	22 nF	12 nF	4.7 nF	4.7 nF	1.5 nF	3.9 nF	1.5 nF				
	X5R	100 µF	47 µF	22 µF	22 µF	10 µF	10 µF										
	X7R	10 µF	10 µF	10 µF	4.7 µF	2.2 µF	2.2 µF	1 µF	100 nF	100 nF	22 nF	10 nF	2.2 nF				
1206 (3216)	NP0	100 nF	100nF	100 nF	100 nF	100 nF	100 nF	100 nF	22 nF	22 nF	10 nF	10 nF	3.3 nF	390 pF	47 pF		
	X5R	100 µF	47 µF	47 µF	22 µF		10 µF	2.2 µF									
	X7R	22 µF	22 µF	10 µF	10 µF	10 µF	4.7 µF	3.3 µF	220 nF	220 nF	68 nF	47 nF	22 nF	4.7 nF	1 nF		
1210 (3225)	NP0			100 nF	100 nF		100 nF	100 nF	47 nF	47 nF	33 nF	33 nF	15 nF	100 pF			
	X5R	220 µF	100 µF	100 µF	22 µF		10 µF										
	X7R		47 µF	22 µF	22 µF	10 µF	10 µF	4.7 µF	680 nF	560 nF	120 nF	100 nF	47 nF	4.7 nF	2.7 nF		

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C – Over the specified temperature range, a capacitance change of ±15% (R) / ±22% (S) is permissible.

Case Size inch (mm)	Voltage	6,3 V	10 V	16 V	25 V	35 V	50 V	100 V	200 V	250 V	500 V	630 V	1 KV	2 KV	3 KV	4 KV	5 KV
	Dielectric																
1808 (4620)	NP0										2.2 nF	2.2 nF	2.2 nF	1 nF	1 nF	220 pF	
	X5R																
	X7R								560 nF	560 nF	47 nF	47 nF	33 nF	10 nF	5.6 nF	1 nF	1 nF
1812 (4632)	NP0			220 nF	220 nF		220 nF	100 nF	100 nF	100 nF	33 nF	33 nF	2.2 nF	1.5 nF	1.2 nF		
	X5R																
	X7R				10 µF		10 µF	2.2 µF	1 µF	1 µF	470 nF	220 nF	100 nF	33 nF	10 nF		
1825 (4663)	NP0			100 nF	100 nF		100 nF	100nF	100 nF	100 nF	47 nF	12 nF					
	X5R																
	X7R						2.2 µF	1 µF	1 µF	1 µF	470 nF	330 nF	150 nF	22 nF	18 nF		
2220 (5750)	NP0						27 nF	27 nF	33 nF	33 nF	27 nF	22 nF	33 nF	6.8 nF	2.2 nF		150 pF
	X5R																
	X7R				10 µF		10 µF	10 µF	2.2 µF	2.2 µF	1 µF	470 nF	220 nF	39 nF	10 nF	10 nF	4.7 nF
2225 (5763)	NP0						82 nF	82 nF	33 nF	33 nF	15 nF	15 nF	15 nF	10 nF	3.3 nF		56 pF
	X5R																
	X7R				4.7 µF		4.7 µF	4.7 µF	2.2 µF	2.2 µF	470 nF	100 nF	100 nF	47 nF	22 nF	4.7 nF	

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C – Over the specified temperature range, a capacitance change of ±15% (R), ±22% (S), or -33% to +22% (T) is permissible.

Standard Safety Capacitors X/Y Certified – **Soft Termination & Arc Prevention** available

Class	Case Size inch (mm)	Capacitance	2R0	5R0	6R8	8R2	100	120	150	180	220	330	360	390	470	560	680	820
			2,0pF	5,0pF	6,8pF	8,2pF	10pF	12pF	15pF	18pF	22pF	33pF	36pF	39pF	47pF	56pF	68pF	82pF
		Temperature Characteristics	Rated Voltage 250Vrms															
X2	1808 (4620)	NP0																
	1808 (4620)	X7R																
	1812 (4632)	X7R																
X1 / Y2	1808 (4620)	NP0																
	1808 (4620)	X7R																
	1812 (4632)	NP0																
	1812 (4632)	X7R																
	2208 (5720)	NP0																
	2208 (5720)	X7R																
	2211 (5728)	NP0																
	2211 (5728)	X7R																
	2220 (5750)	NP0																
	2220 (5750)	X7R																

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C – Over the specified temperature range, a capacitance change of ±15% (R) / ±22% (S) is permissible.

Standard Safety Capacitors X/Y Certified – **Soft Termination & Arc Prevention** available

Class	Case Size inch (mm)	Capacitance	101	121	131	151	181	221	271	331	391	471	561	681	821	102	122	152	182	222	272	332	472	103
			100pF	120pF	130pF	150pF	180pF	220pF	270pF	330pF	390pF	470pF	560pF	680pF	820pF	1nF	1,2nF	1,5nF	1,8nF	2,2nF	2,7nF	3,3nF	4,7nF	10nF
		Temperature Characteristics	Rated Voltage 250Vrms																					
X2	1808 (4620)	NP0																						
	1808 (4620)	X7R																						
	1812 (4632)	X7R																						
X1 / Y2	1808 (4620)	NP0																						
	1808 (4620)	X7R																						
	1812 (4632)	NP0																						
	1812 (4632)	X7R																						
	2208 (5720)	NP0																						
	2208 (5720)	X7R																						
	2211 (5728)	NP0																						
	2211 (5728)	X7R																						
	2220 (5750)	NP0																						
	2220 (5750)	X7R																						

X = -55°C, 5 = +85°C, 6 = +105°C, 7 = +125°C – Over the specified temperature range, a capacitance change of ±15% (R) / ±22% (S) is permissible.

Standard Safety Capacitors X/Y Certified – **Soft Termination & Arc Prevention** available

Class	Case Size inch (mm)	Capacitance	101	121	131	151	181	221	271	331	391	471	561	681	821	102	122	152	182	222	272	332	472	562	682
			100pF	120pF	130pF	150pF	180pF	220pF	270pF	33pF	390pF	470pF	560pF	680pF	820pF	1,0nF	1,2nF	1,5nF	1,8nF	2,2nF	2,7nF	3,3nF	4,7nF	5,6nF	6,8nF
		Temperature Characteristics	Rated Voltage 250Vrms																						
X2	2220 (5750)	X7R																							
	2825 (7364)	X7R																							

Class	Case Size inch (mm)	Capacitance	101	121	131	151	181	221	271	331	391	471	561	681	821	102	122	152	182	222	272	332	472	562	682
			100pF	120pF	130pF	150pF	180pF	220pF	270pF	33pF	390pF	470pF	560pF	680pF	820pF	1,0nF	1,2nF	1,5nF	1,8nF	2,2nF	2,7nF	3,3nF	4,7nF	5,6nF	6,8nF
		Temperature Characteristics	Rated Voltage 350Vrms																						
X2	2220 (5750)	X7R																							

Class	Case Size inch (mm)	Capacitance	103	123	153	183	223	273	333	393	473	563	683	823	104	124	224
			10nF	12nF	15nF	18nF	22nF	27nF	33nF	39nF	47nF	56nF	68nF	82nF	100nF	120nF	220nF
		Temperature Characteristics	Rated Voltage 250Vrms														
X2	2220 (5750)	X7R															
	2825 (7364)	X7R															

Class	Case Size inch (mm)	Capacitance	103	123	153	183	223	273	333	393	473	563	683	823	104	124	224
			10nF	12nF	15nF	18nF	22nF	27nF	33nF	39nF	47nF	56nF	68nF	82nF	100nF	120nF	220nF
		Temperature Characteristics	Rated Voltage 350Vrms														
X2	2220 (5750)	X7R															

Standard Safety Capacitors X/Y Certified – **Soft Termination & Arc Prevention** available

Class	Case Size inch (mm)	Capacitance	360	390	400	420	470	560	680	820	101	121	131	151	181	201	221	271	301	331	361	391
			36pF	39pF	40pF	42pF	47pF	56pF	68pF	82pF	100pF	120pF	130pF	150pF	180pF	200pF	220pF	270pF	300pF	330pF	360pF	390pF
		Temperature Characteristics																				
X2	1808 (4620)	X7R																				
X1 / Y2	2208 (5820)	X7R																				
X1 / Y2	2220 (5850)	X7R																				

Class	Case Size inch (mm)	Capacitance	431	471	511	561	621	681	751	821	102	122	152	182	202	222	272	332	472	562
			430pF	470pF	510pF	560pF	620pF	680pF	750pF	820pF	1nF	1,2nF	1,5nF	1,8nF	2,0nF	2,2nF	2,7nF	3,3nF	4,7nF	5,6nF
		Temperature Characteristics																		
X2	1808 (4620)	X7R																		
X1 / Y2	2208 (5820)	X7R																		
X1 / Y2	2220 (5850)	X7R																		

Standard Safety Capacitors X/Y Certified – **Soft Termination & Arc Prevention** available

Class	Case Size inch (mm)	Capacitance	2R0	5R0	6R8	8R2	100	110	120	130	150	160	180	200	220	240	270	300	330	360	390	430	470	510	560
		Temperature Characteristics	2pF	5pF	6.8pF	8.2pF	10pF	11pF	12pF	13pF	15pF	16pF	18pF	20pF	22pF	24pF	27pF	30pF	33pF	36pF	39pF	43pF	47pF	51pF	56pF
X1 / Y1	3906	NP0																							

Class	Case Size inch (mm)	Capacitance	821	101	121	151	181	221	271	331	391	471	561	681	821	102	122	152	182	222	272	332	472	562	682
		Temperature Characteristics	82pF	100pF	120pF	150pF	180pF	220pF	270pF	330pF	390pF	470pF	560pF	68pF	820pF	1nF	1.2nF	1.5nF	1.8nF	2.2nF	2.7nF	3.3nF	4.7nF	5.6nF	6.8nF
X1 / Y1	3906	X7R																							
	4007																								
	4012																								

Class	Case Size inch (mm)	Capacitance	620	680	750	820	910	101	121	151	181	191	221	471	681	821	102
		Temperature Characteristics	62pF	68pF	75pF	82pF	91pF	100pF	120pF	150pF	180pF	190pF	220pF	470pF	680pF	820pF	1nF
X1 / Y1	3906	NP0															

Class	Case Size inch (mm)	Capacitance	103	123	153	183	223	273	333	393	473	563	683	823	104	224	474
		Temperature Characteristics	10nF	12nF	15nF	18nF	22nF	27nF	33nF	39nF	47nF	56nF	68nF	82nF	100nF	220nF	470nF
X1 / Y1	3906	X7R															
	4007																
	4012																

Case Size inch (mm)	Capacitance	151	221	331	391	471	561	681	821	102	122	152	182	222	272	332	392	472	562	682	822	103	123	153	183	223	273	
		150pF	220pF	33pF	390pF	470pF	560pF	680pF	820pF	1nF	1.2nF	1.5nF	1.8nF	2.2nF	2.7nF	3.3nF	3.9nF	4.7nF	5.6nF	6.8nF	8.2nF	10nF	12nF	15nF	18nF	22nF	27nF	
	Voltage																											
0402 (1005)	50 V																											
0603 (1005)	16 V																											
	50 V																											
0805 (2012)	16 V			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	25 V			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	50 V			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	100 V			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	250 V			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1206 (3216)	25 V			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	50 V			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	100 V			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	250 V			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	630 V									X	X	X	X	X	X	X	X	X	X	X	X	X						
	1 KV									X	X	X	X	X	X	X	X	X										
1210 (3225)	25 V																											
	50 V																											
	1KV									X	X	X	X	X	X	X	X	X	X	X	X	X						
	2 KV		A	A	A	A	A	A	A	A	A	A	A	A								X						
1812 (4632)	1 KV			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
	2 KV		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A					
2220 (5750)	2 KV									X	X	X	X	X	X	X	X	X	X	X	X	X	X					
	3KV	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A						
2225 (5764)	630 V																											

X = available only with soft termination (Superterm) O = optionally available with or without soft termination (Superterm) S = not available with soft termination (Superterm) A = available only with Arc Prevention Coating

Case Size inch (mm)	Capacitance	333	393	473	563	683	823	104	124	154	184	224	274	334	394	474	564	684	824	105	155	225	335	475	685	106
		33nF	39nF	47nF	56nF	68nF	82nF	100nF	120nF	150nF	180nF	220nF	270nF	330nF	390nF	470nF	560nF	680nF	820nF	1uF	1.5uF	2.2uF	3.3uF	4.7uF	6.8uF	10uF
	Voltage																									
0402 (1005)	50 V							S																		
0603 (1005)	16 V																			X						
	50 V							X				X														
0805 (2012)	16 V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
	25 V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
	50 V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
	100 V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
	250 V																									
1206 (3216)	25 V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
	50 V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		
	100 V	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
	250 V	X	X	X	X	X	X	X																		
	630 V																									
1210 (3225)	25 V																			X	X	X	X	X	X	X
	50 V																			X	X	X	X	X		coming soon
	1KV																									
	2 KV																									
1812 (4632)	1 KV																									
	2 KV																									
2220 (5750)	2 KV																									
	3KV																									
2225 (5764)	630 V															X										

X = available only with soft termination (Superterm) O = optionally available with or without soft termination (Superterm) S = not available with soft termination (Superterm) A = available only with Arc Prevention Coating

Case Size inch (mm)	Capacitance	9R1	100	120	150	180	200	220	270	300	330	390	470	560	680	820	101	121	151	181	221	271	331	391	471	561	681
		9.1pF	10pF	12pF	15pF	18pF	20pF	22pF	27pF	30pF	33pF	39pF	47pF	56pF	68pF	82pF	100pF	120pF	150pF	180pF	22pF	270pF	330pF	390pF	470pF	560pF	680pF
	Voltage																										
0805 (2012)	25 V		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	X	X	X	X
	50 V		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	X	X	X	X
	100 V		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	X	X	X	X
	250 V		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	X	X	X	X
1206 (3216)	25 V					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 V					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 V					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250 V					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 V					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	630 V					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1 KV					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1210 (3225)	1 KV																					X	X	X			
1812 (4632)	1 KV																										
1825 (4663)	500 V																						0	0	0	0	0
2220 (5750)	500 V																						0	0	0	0	0
	630 V																					0	0	0	0	0	
	1 KV																						0	0	0	0	
	2 KV																						0	0	0	0	

X = available only with soft termination (Superterm) 0 = optionally available with or without soft termination (Superterm) S = not available with soft termination (Superterm) A = available only with Arc Prevention Coating

Case Size inch (mm)	Capacitance	821	102	122	152	182	222	272	332	392	472	562	682	822	103	123	153	183	223	333	393	473	563	683	823	104
		820pF	1nF	1.2nF	1.5nF	1.8nF	2.2nF	2.7nF	3.3nF	3.9nF	4.7nF	5.6nF	6.8nF	8.2nF	10nF	12nF	15nF	18nF	22nF	33nF	39nF	47nF	56nF	68nF	82nF	100nF
	Voltage																									
0805 (2012)	25 V	X	X	X	X	X	X	X	X	X	X	X														
	50 V	X	X	X	X	X	X	X	X	X	X	X														
	100 V	X	X	X	X	X	X	X	X	X	X	X														
	250 V	X	X	X	X	X	X	X	X	X	X															
1206 (3216)	25 V	O	O	O	O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
	50 V	O	O	O	O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
	100 V	O	O	O	O	X	X	X	X	X	X	X	X	X												
	250 V	O	O	O	O	X	X	X	X	X	X	X	X	X												
	500 V	O	O																							
	630 V	O	O																							
	1 KV	O	O																							
1210 (3225)	1 KV																									
1812 (4632)	1 KV		X	X	X	X	X	X	X	X	X	X														
1825 (4663)	500 V														X	X	X	X	X	X	X	X				
2220 (5750)	500 V	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O						
	630 V	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O						
	1 KV	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O						
	2 KV	O	O	O	O	O	O	O	O	O	O	O	O													

X = available only with soft termination (Superterm) O = optionally available with or without soft termination (Superterm) S = not available with soft termination (Superterm) A = available only with Arc Prevention Coating

Case Size inch (mm)	Capacitance	9R1	100	120	150	180	220	330	360	390	400	420	470	560	680	820	101	121	131	151	181	201	221	271	301	331	361
		9,1pF	10pF	12pF	15pF	18pF	22pF	33pF	36pF	39pF	40pF	42pF	47pF	56pF	68pF	82pF	100pF	120pF	130pF	150pF	180pF	200pF	220pF	270pF	300pF	330pF	360pF
	Voltage																										
1808 (4620)	X2																			X	X		X	X		X	
2208 (5820)	X1 /Y2								X	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
2220 (5850)	X1 /Y2																X	X	X	X			X	X		X	

Case Size inch (mm)	Capacitance	391	431	471	511	561	621	681	751	821	102	122	152	182	202	222	272	332	472	562	682	822	103	153	223	473
		390pF	430pF	470pF	510pF	560pF	620pF	680pF	750pF	820pF	1nF	1,2nF	1,5nF	1,8nF	2,0nF	2,2nF	2,7nF	3,3nF	3,7nF	5,6nF	6,8nF	8,2nF	10nF	15nF	22nF	47nF
	Voltage																									
1808 (4620)	X2	X		X		X		X		X	X															
2208 (5820)	X1 /Y2	X		X		X		X		X	X															
2220 (5850)	X1 /Y2	X		X		X		X		X	X		X			X	X	X	X							

X = nur mit Soft Termination (Superterm) verfügbar O = optional mit und ohne Soft Termination (Superterm) verfügbar S = keine softe Terminierung (Super Term) verfügbar A = nur mit Arc Prevention Coating verfügbar



What's your mission?

SALES

Tel. +49 9122 8768-0
sales@rm-components.de

RM Components GmbH
O'Brien-Straße 5
D-91126 Schwabach

info@rm-components.de
www.rm-components.de

