



SAMWHA MLCC Portfolio



CS Series (General Applications)

- **Class I (C0G) : Temperature Compensation Type**
- **Class II (X5R, X7R): High Dielectric Type**

CS Series (General Applications)



X5R (Class II) : High Dielectric Type

General Product
 Soft Termination

Size (inch)	Rated Voltage (V)	Capacitance																			Capacitance Range						
		1nF	2.2nF	4.7nF	10nF	15nF	47nF	0.1uF	0.15uF	0.22uF	0.47uF	1uF	2.2uF	4.7uF	6.8uF	10uF	22uF	47uF	100uF	220uF		330uF					
0603 (0201)	6.3	General Product																									100pF~4.7uF
	10	General Product																									
	16	General Product																									
	25	General Product																									
1005 (0402)	6.3	General Product													Soft Termination											100pF~22uF	
	10	General Product											Soft Termination														
	16	General Product							Soft Termination																		
	25	General Product						Soft Termination																			
	50	General Product					Soft Termination																				
1608 (0603)	6.3	General Product													Soft Termination											100pF~47uF	
	10	General Product											Soft Termination														
	16	General Product							Soft Termination																		
	25	General Product						Soft Termination																			
	50	General Product					Soft Termination																				
2012 (0805)	6.3	General Product													Soft Termination											100pF~100uF	
	10	General Product											Soft Termination														
	16	General Product							Soft Termination																		
	25	General Product						Soft Termination																			
	50	General Product					Soft Termination																				

X5R (Class II) : High Dielectric Type

General Product
 Soft Termination

Size (inch)	Rated Voltage (V)	Capacitance																				Capacitance range	
		1nF	2.2nF	4.7nF	10nF	15nF	47nF	0.1uF	0.15uF	0.22uF	0.47uF	1uF	2.2uF	4.7uF	6.8uF	10uF	22uF	47uF	100uF	220uF	330uF		
3216 (1206)	6.3	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	100pF~100uF
	10	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
	16	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
	25	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
	50	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
3225 (1210)	6.3	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	100pF~100uF
	10	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
	16	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
	25	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
	50	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
4532 (1812)	6.3	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	100pF~100uF
	10	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
	16	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
	25	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	
	50	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	

CS Series (General Applications)



X7R (Class II): High Dielectric Type

General Product

Soft Termination

Size (inch)	Rated Voltage (V)	Capacitance																			Capacitance range
		1nF	2.2nF	4.7nF	6.8nF	10nF	15nF	22nF	47nF	68nF	100nF	220nF	330nF	470nF	680nF	1uF	2.2uF	4.7uF	10uF	22uF	
0603 (0201)	6.3																				1nF~10nF
	10																				
	16																				
	25																				
	50																				
1005 (0402)	6.3						X7S	X7S	X7S	X7T	X7T										1nF~1uF
	10						X7S	X7S	X7S	X7T	X7T										
	16						X7S	X7S	X7S	X7T	X7T										
	25						X7S	X7S	X7S	X7T	X7T										
	50						X7S	X7S	X7S	X7T	X7T										
1608 (0603)	6.3												X7T	X7T	X7T	X7T	X7T				1nF~2.2uF
	10												X7T	X7T	X7T	X7T	X7T				
	16												X7T	X7T	X7T	X7T					
	25												X7T	X7T	X7T	X7T					
	50																				
	100																				
	250																				
2012 (0805)	6.3															X7T	X7T	X7T			1nF~10uF
	10															X7T	X7T	X7T			
	16															X7T	X7T				
	25															X7T	X7T				
	50															X7T	X7T				
	100																				
	250																				

X7R (Class II): High Dielectric Type

General Product

Soft Termination

Size (inch)	Rated Voltage (V)	Capacitance																		Capacitance range			
		1nF	2.2nF	4.7nF	6.8nF	10nF	15nF	22nF	47nF	68nF	100nF	220nF	330nF	470nF	680nF	1uF	2.2uF	4.7uF	10uF		22uF	47uF	
3216 (1206)	6.3																	X7S	X7T	X7T		1nF~22uF	
	10																		X7S	X7T	X7T		
	16																		X7S	X7T			
	25																		X7S	X7T			
	50																		X7S				
	100																						
	250																						
	630																						
	1000																						
	2000																						
3225 (1210)	6.3																				X7T	1nF~47uF	
	10																				X7T		
	16																				X7T		
	25																				X7T		
	50																				X7T		
	100																				X7T		
	250																						
	630																						
	1000																						
	2000																						

X7R (Class II): High Dielectric Type

General Product
 Soft Termination

Size (inch)	Rated Voltage (V)	Capacitance																				Capacitance range		
		1nF	2.2nF	4.7nF	6.8nF	10nF	15nF	22nF	47nF	68nF	100nF	220nF	330nF	470nF	680nF	1uF	2.2uF	4.7uF	6.8uF	10uF	22uF		33uF	
4520 (1808)	100	General	General	General	General	General	General	General	General	General	General	General	General	General	General									1nF~680nF
	250	General	General	General	General	General	General	General	General	General	General	General	General	General	General									
	630	General	General	General	General	General	General	General	General	General	General	General	General	General	General									
	1000	General	General	General	General	General	General	General	General	General	General	General	General	General	General									
	2000	General	General	General	General	General	General	General	General	General	General	General	General	General	General									
	3000	General	General	General	General	General	General	General	General	General	General	General	General	General	General									
4532 (1812)	16	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	X7S	1nF~22uF
	25	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	X7S	
	50	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General		
	100	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General		
	250	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General		
	630	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General		
	1000	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General		
	2000	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General		

※ Please contact us if you have any inquiry about our product.

CQ Series (Automotive Applications)

- **Class I (C0G) : Temperature Compensation Type**
- **Class II (X5R, X7R): High Dielectric Type**

X7R (Class II): High Dielectric Type

General Product

Soft Termination

		X7R																						
Size (inch)	Rated Voltage (V)	Capacitance																				Capacitance range		
		1nF	2.2nF	4.7nF	6.8nF	10nF	15nF	22nF	47nF	68nF	100nF	220nF	330nF	470nF	680nF	1uF	2.2uF	4.7uF	6.8uF	10uF	22uF		33uF	
4520 (1808)	100	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General								1nF~680nF
	250	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General								
	630	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General								
	1000	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General								
	2000	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General								
	3000	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General								
4532 (1812)	16	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	Soft	1nF~22uF
	25	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	Soft	
	50	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	Soft	
	100	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	Soft	
	250	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	Soft	
	630	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	Soft	
	1000	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	Soft	
	2000	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	General	Soft	

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