

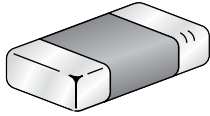
AVX SMD FLEXITERM™ Ceramic Capacitors, Soft Termination

RoHS Compliant This product is RoHS compliant.

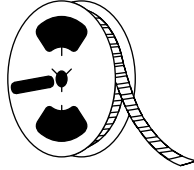
With increased requirements from the automotive industry for additional component robustness, AVX recognized the need to produce a MLCC with enhanced mechanical strength. It was noted that many components may be subject to severe flexing and vibration when used in various under the bonnet automotive applications.

To satisfy the requirement for enhanced mechanical strength, AVX had to find a way of ensuring that electrical integrity is maintained while external forces are being applied to the component. This soft termination is designed to enhance the mechanical flexure and temperature cycling performance of a standard ceramic capacitor with an X7R dielectric.

In addition to automotive applications, it also provides Design Engineers with a satisfactory solution when designing PCBs which may be subject to high levels for board flexure.



Dimensions:
Standard EIA Case



4000 Piece Reels

MLCC WITH SOFT TERMINATION

For quantities of 8000 and up, call for quote.

MOUSER STOCK NO.	AVX Part Number	Value (pF)	Volt	Tol. ± %	Price Each			Reel Qty 4000
					1	100	500	
0603 Style								
581-06035C331JAZ2A	06035C331JAZ2A	330	50	5				
581-06031C331JAZ2A	06031C331JAZ2A	330	100	5				
581-06035C471JAZ2A	06035C471JAZ2A	470	50	5				
581-06031C471JAZ2A	06031C471JAZ2A	470	100	5				
581-06031C681JAZ2A	06031C681JAZ2A	680	100	5				
581-06031C821JAZ2A	06031C821JAZ2A	820	100	5				
581-06035C102JAZ2A	06035C102JAZ2A	1000	50	5				
581-06031C102JAZ2A	06031C102JAZ2A	1000	100	5				
581-06031C122JAZ2A	06031C122JAZ2A	1200	100	5				
581-06031C152JAZ2A	06031C152JAZ2A	1500	100	5				
581-06035C222JAZ2A	06035C222JAZ2A	2200	50	5				
581-06031C222JAZ2A	06031C222JAZ2A	2200	100	5				
581-06035C332JAZ2A	06035C332JAZ2A	3300	50	5				
581-06031C332JAZ2A	06031C332JAZ2A	3300	100	5				
581-0603YC472JAZ2A	0603YC472JAZ2A	4700	16	5				
581-06033C472JAZ2A	06033C472JAZ2A	4700	25	5				
581-06035C472JAZ2A	06035C472JAZ2A	4700	50	5				
581-06031C472JAZ2A	06031C472JAZ2A	4700	100	5				
581-06033C682JAZ2A	06033C682JAZ2A	6800	25	5				
581-06031C822JAZ2A	06031C822JAZ2A	8200	100	5				
581-06035C103JAZ2A	06035C103JAZ2A	10000	50	5				
581-06031C103JAZ2A	06031C103JAZ2A	10000	100	5				
581-06035C223JAZ2A	06035C223JAZ2A	22000	50	5				
581-0603YC473JAZ2A	0603YC473JAZ2A	47000	16	5				
581-06033C473JAZ2A	06033C473JAZ2A	47000	25	5				
581-06035C104JAZ2A	06035C104JAZ2A	0.1µF	16	5				
0805 Style								
581-0805ZC331JAZ2A	0805ZC331JAZ2A	330	10	5				
581-08053C331JAZ2A	08053C331JAZ2A	330	25	5				
581-08055C331JAZ2A	08055C331JAZ2A	330	50	5				
581-08053C471JAZ2A	08053C471JAZ2A	470	25	5				
581-08055C471JAZ2A	08055C471JAZ2A	470	50	5				
581-08053C102JAZ2A	08053C102JAZ2A	1000	25	5				
581-08055C102JAZ2A	08055C102JAZ2A	1000	50	5				
581-08055C122JAZ2A	08055C122JAZ2A	1200	50	5				
581-08055C222JAZ2A	08055C222JAZ2A	2200	50	5				
581-08055C332JAZ2A	08055C332JAZ2A	3300	50	5				
581-0805ZC472JAZ2A	0805ZC472JAZ2A	4700	10	5				
581-08053C472JAZ2A	08053C472JAZ2A	4700	25	5				
581-08055C472JAZ2A	08055C472JAZ2A	4700	50	5				
581-08053C103JAZ2A	08053C103JAZ2A	10000	25	5				
581-08055C103JAZ2A	08055C103JAZ2A	10000	50	5				
581-08055C123JAZ2A	08055C123JAZ2A	12000	50	5				
581-08055C223JAZ2A	08055C223JAZ2A	22000	50	5				
581-08055C333JAZ2A	08055C333JAZ2A	33000	50	5				
581-0805ZC473JAZ2A	0805ZC473JAZ2A	47000	10	5				
581-08053C473JAZ2A	08053C473JAZ2A	47000	25	5				
581-08055C473JAZ2A	08055C473JAZ2A	47000	50	5				
581-08056C104JAZ2A	08056C104JAZ2A	0.1µF	6.3	5				
581-0805ZC104JAZ2A	0805ZC104JAZ2A	0.1µF	10	5				
581-08053C104JAZ2A	08053C104JAZ2A	0.1µF	25	5				
581-08055C104JAZ2A	08055C104JAZ2A	0.1µF	50	5				
								2000
1206 Style								
581-1206GC101KAZ1A	1206GC101KAZ1A	100	2000	10				
581-1206GC102KAZ1A	1206GC102KAZ1A	1000	2000	10				
								4000
1206 Style								
581-12063C102JAZ2A	12063C102JAZ2A	1000	25	5				
581-12065C102JAZ2A	12065C102JAZ2A	1000	50	5				

Applications:

High Flexure Stress Circuit Boards
 • e.g. Depanelization: Components near edges of board

Variable Temperature Applications
 • Soft termination offers improved reliability performances in applications where there is temperature variation
 • e.g. All kind of engine sensors: Direct connection to battery rail

Automotive Applications
 • Improved reliability
 • Excellent mechanical performance and thermo-mechanical performance

Testing:
 • Key test used to compare soft termination to AEC-QC200 qualification:
 • Bend test
 • Temperature cycle test

Product Advantages:

- High mechanical performance able to withstand, 5mm bend test guaranteed
- Open failure mode is apparent when products are overstressed by 5mm
- Increased temperature cycling performance, 3000 cycles and beyond
- Flexible termination system
- Reduction in circuit board flex failures
- Base metal electrode system
- Automotive or commercial grade products available
- Temperature range: -55°C to +125°C

The industry standard for flexure is 2 mm minimum with Soft Termination. AVX guarantees a minimum flexure of 5 mm, without any internal cracks. Beyond 5mm generally the component will open. The industry standard for temperature cycling is 1000 cycles, AVX guarantees 3000 cycles.

AEC-Q200 Qualifications:

- Created by the Automotive Electronics Council
- Specification defining stress test qualification for passive components



RoHS Compliant

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MOUSER STOCK NO.	AVX Part Number	Value (pF)	Volt	Tol. ± %	Price Each			Reel Qty 4000
					1	100	500	
1206 Style (Cont.)								
581-12061C102JAZ2A	12061C102JAZ2A	1000	100	5				
581-12065C122JAZ2A	12065C122JAZ2A	1200	50	5				
581-12061C122JAZ2A	12061C122JAZ2A	1200	100	5				
581-12065C222JAZ2A	12065C222JAZ2A	2200	50	5				
581-12061C222JAZ2A	12061C222JAZ2A	2200	100	5				
581-12061C332JAZ2A	12061C332JAZ2A	3300	100	5				
581-12065C472JAZ2A	12065C472JAZ2A	4700	50	5				
581-12061C472JAZ2A	12061C472JAZ2A	4700	100	5				
581-12061C682JAZ2A	12061C682JAZ2A	6800	100	5				
581-12061C822JAZ2A	12061C822JAZ2A	8200	100	5				
581-12063C103JAZ2A	12063C103JAZ2A	10000	25	5				
581-12065C103JAZ2A	12065C103JAZ2A	10000	50	5				
581-12061C103JAZ2A	12061C103JAZ2A	10000	100	5				
581-12065C223JAZ2A	12065C223JAZ2A	22000	50	5				
581-12061C223JAZ2A	12061C223JAZ2A	22000	100	5				
581-12063C333JAZ2A	12063C333JAZ2A	33000	25	5				
581-12065C333JAZ2A	12065C333JAZ2A	33000	50	5				
581-12061C333JAZ2A	12061C333JAZ2A	33000	100	5				
581-1206Y473JAZ2A	1206Y473JAZ2A	47000	16	5				
581-12063C473JAZ2A	12063C473JAZ2A	47000	25	5				
581-12065C473JAZ2A	12065C473JAZ2A	47000	50	5				
581-12061C473MAZ2A	12061C473MAZ2A	47000	100	20				
581-12061C683MAZ2A	12061C683MAZ2A	68000	100	20				
581-1206Y104JAZ2A	1206Y104JAZ2A	0.1µF	16	5				
581-12063C104JAZ2A	12063C104JAZ2A	0.1µF	25	5				
581-12065C104JAZ2A	12065C104JAZ2A	0.1µF	50	5				
581-12065C224MAZ2A	12065C224MAZ2A	0.22µF	50	20				
581-12063C334MAZ2A	12063C334MAZ2A	0.33µF	25	20				
581-12063C474MAZ2A	12063C474MAZ2A	0.47µF	25	20				
581-1206Y105MAZ2A	1206Y105MAZ2A	1µF	16	20				
								2000
1210 Style								
581-1210GC102KAZ1A	1210GC102KAZ1A	1000	2000	10				
581-1210AC103KAZ1A	1210AC103KAZ1A	0.01µF	2000	10				
								4000
1210 Style								
581-12101C223KAZ2A	12101C223KAZ2A	22000	100	10				
581-12101C333KAZ2A	12101C333KAZ2A	33000	100	10				
581-12101C473KAZ2A	12101C473KAZ2A	47000	100	10				
581-12101C683MAZ2A	12101C683MAZ2A	68000	100	20				
581-12101C823MAZ2A	12101C823MAZ2A	82000	100	20				
581-12103C104KAZ2A	12103C104KAZ2A	0.1µF	25	10				
581-12105C104KAZ2A	12105C104KAZ2A	0.1µF	50	10				
581-12103C224MAZ2A	12103C224MAZ2A	0.22µF	25	20				
581-12105C224MAZ2A	12105C224MAZ2A	0.22µF	50	20				
								1000
1808 Style								
581-1808HC102KAZ1A	1808HC102KAZ1A	1000	3000	10				
581-1808HC102MAZ1A	1808HC102MAZ1A	1000	3000	20				
								1000
1812 Style								
581-1812HC102KAZ1A	1812HC102KAZ1A	1000	3000	10				
581-1812HC102MAZ1A	1812HC102MAZ1A	1000	3000	20				
581-1812GC472KAZ1A	1812GC472KAZ1A	4700	2000	10				
581-1812AC103KAZ1A	1812AC103KAZ1A	10000	1000	10				
								1000
1825 Style								
581-1825AC473KAZ1A	1825AC473KAZ1A	47000	1000	10				
581-1825CC104KAZ1A	1825CC104KAZ1A	0.1µF	600	10				
								1000
2220 Style								
581-2220GC103KAZ1A	2220GC103KAZ1A							