

# AVX Automotive MLCC



## AVX MH CERAMIC CAPACITORS

### Lead Free Ceramic Capacitor in Molded SM Leadframe



AVX are pleased to introduce the MH range of multilayer ceramic capacitors. The MH components are surface mount molded parts with a multilayer ceramic insert. MH capacitors combine the ceramic attributes of very low ESR, non polar construction, excellent high frequency behaviour, excellent voltage stress capabilities and wide temperature range, with the enhanced mechanical protection of a molded case. The MH range provides a lead free solution to customers who have previously been unable to use large case ceramic capacitors because of mechanical stressing concerns.

- Tin plated
- 7" reel

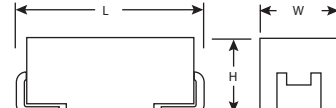


For quantities of 4,000 and up, call for quote.

MOUSER STOCK NO.	AVX Part Number	Temp Coeff.	Value pF	Volt	Price Each			Reel Qty	Price Per Piece
					1	10	100		
581-MHV11C105MAT2A	MHV11C105MAT2A	X7R	1.0	100	15.90	13.25	10.60	400	4.77
581-MHV11C155MAT2A	MHV11C155MAT2A	X7R	1.5	100	16.56	13.80	11.04	400	4.97
581-MHV11C225MAT2A	MHV11C225MAT2A	X7R	2.2	100	17.58	14.65	11.72	400	5.27
581-MHV15C475MAT2A	MHV15C475MAT2A	X7R	4.7	50	18.12	15.10	12.08	400	5.44
581-MHV13C106MAT2A	MHV13C106MAT2A	X7R	10	25	18.48	15.40	12.32	400	5.54
581-MHV15C106MAT2A	MHV15C106MAT2A	X7R	10	50	18.48	15.40	12.32	400	5.54
581-MHV13C226MAT2A	MHV13C226MAT2A	X7R	22	25	18.60	15.50	12.40	400	5.58

### DIMENSIONS: mm (in.)

L	W	H
L±0.20(0.008)	W+0.20(0.008) -0.10(0.004)	H+0.20(0.008) -0.10(0.004)
7.30 (0.287)	6.10 (0.240)	3.45±0.30 (0.136±0.012)



Ceramic Caps, SMD

## AVX AUTOMOTIVE MLCC

AVX Corporation has supported the automotive industry requirements for multilayer ceramic capacitors consistently for more than 10 years. Products have been developed and tested specifically for automotive applications and all manufacturing facilities are QS9000 and VDA 6.4 approved

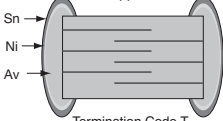
As part of AVX's sustained investment in capacity and state of the art technology, they are now transitioning from the established Pd/Ag electrode system to a Base Metal Electrode system (BME).

AVX is using AECQ200 as the qualification vehicle for this transition. A detailed qualification package is available on request and contains results on a range of part numbers including:

- X7R dielectric components containing BME electrode and copper terminations with a Ni/Sn plated overcoat
- COG/NPO dielectric components containing Pd/Ag electrode and silver termination with a Ni/Sn plated overcoat

NPO Dielectric

NPO Ag/Pd Electrode  
Nickel Barrier Termination  
PCD Application



RoHS Compliant

### DIMENSIONS: mm (in.)

Size	0603	0805	1206	1210
Length (L)	1.60 ± .15 (.063 ± .006)	2.01 ± .20 (.079 ± .008)	3.20 ± 0.20 (.126 ± .008)	3.20 ± 0.20 (.126 ± .008)
Width (W)	.81 ± .15	1.25 ± .20	1.60 ± 0.20	2.50 ± 0.20
Thickness (t)	.80 ± .10	1.25 ± .20	0.50 ± 0.25	0.50 ± 0.25
Termination Code T	.014 ± .006	.020 ± .010	.020 ± .010	.020 ± .010

MOUSER STOCK NO.	AVX Part Number	Temp Coeff.	Value pF	Volt	Tol. ± %	Price Each				Reel Qty	Price Per Piece
						1	100	500	1000		
<b>Style 0603</b>											
581-06035A100J4	06035A100J4T2A	COG	10	50	5	.16	.13	.10	.08	4000	.06
581-06035A220J4	06035A220J4T2A	COG	22	50	5	.16	.13	.10	.08	4000	.06
581-06035A330J4	06035A330J4T2A	COG	33	50	5	.41	.25	.21	.15	4000	.13
581-06035A470J4	06035A470J4T2A	COG	47	50	5	.16	.13	.10	.08	4000	.06
581-06035A680J4	06035A680J4T2A	COG	68	50	5	.16	.13	.10	.08	4000	.06
581-06035A101J4	06035A101J4T2A	COG	100	50	5	.16	.13	.10	.08	4000	.06
581-06035C221J4	06035C221J4T2A	COG	220	50	5	.16	.13	.10	.08	4000	.06
581-06035A331J4	06035A331J4T2A	COG	330	50	5	.16	.13	.10	.08	4000	.06
581-06035A471J4	06035A471J4T2A	COG	470	50	5	.24	.19	.14	.12	4000	.08
581-06035C102K4	06035C102K4T2A	X7R	1000	50	10	.22	.18	.13	.11	4000	.08
581-06035C222K4	06035C222K4T2A	X7R	2200	50	10	.18	.15	.128	.098	4000	.068
581-06035C332K4	06035C332K4T2A	X7R	3300	50	10	.18	.15	.128	.098	4000	.068
581-06035C472K4	06035C472K4T2A	X7R	4700	50	10	.18	.15	.128	.098	4000	.068
581-06035C682K4	06035C682K4T2A	X7R	6800	50	10	.17	.14	.10	.08	4000	.06
581-06035C103K4	06035C103K4T2A	X7R	10000	50	10	.30	.25	.18	.15	4000	.10
581-06035C223K4	06035C223K4T2A	X7R	22000	50	10	.24	.19	.14	.12	4000	.08
581-06035C333K4	06035C333K4T2A	X7R	33000	50	10	.24	.19	.14	.12	4000	.08
581-06035C473K4	06035C473K4T2A	X7R	47000	50	10	.27	.22	.16	.14	4000	.10
581-06033C104K4	06033C104K4T2A	X7R	0.1µF	25	10	.38	.31	.23	.19	4000	.13
581-06035C104K4	06035C104K4T2A	X7R	0.1µF	50	10	.38	.31	.23	.19	4000	.13
581-06035C104K4	06035C104K4T2A	X7R	0.1µF	16	10	.40	.33	.24	.20	4000	.14
581-06035C102K4	06035C102K4T2A	X8R	1000	50	10	.16	.13	.10	.08	4000	.06
581-06035F103K4	06035F103K4T2A	X8R	10000	50	10	.18	.17	.143	.083	4000	.057
581-06035F473K4	06035F473K4T2A	X8R	47000	50	10	.36	.30	.222	.15	4000	.10
581-06033F683K4	06033F683K4T2A	X8R	68000	25	10	.39	.32	.23	.20	4000	.14

MOUSER STOCK NO.	AVX Part Number	Temp Coeff.	Value pF	Volt	Tol. ± %	Price Each				Reel Qty	Price Per Piece
						1	100	500	1000		
<b>Style 0805</b>											
581-08051A100J4	08051A100J4T2A	COG	10	100	5	.18	.15	.11	.09	4000	.06
581-08051A220J4	08051A220J4T2A	COG	22	100	5	.23	.19	.14	.12	4000	.08
581-08051A330J4	08051A330J4T2A	COG	33	100	5	.18	.15	.11	.09	4000	.06
581-08051A470J4	08051A470J4T2A	COG	47	100	5	.18	.15	.11	.09	4000	.06
581-08051A680J4	08051A680J4T2A	COG	68	100	5	.18	.15	.11	.09	4000	.06
581-08051A101J4	08051A101J4T2A	COG	100	100	5	.18	.15	.11	.09	4000	.06
581-08051A221J4	08051A221J4T2A	COG	220	100	5	.22	.18	.13	.11	4000	.08
581-08051A331J4	08051A331J4T2A	COG	330	100	5	.29	.24	.17	.14	4000	.10
581-08051A471J4	08051A471J4T2A	COG	470	100	5	.29	.24	.17	.14	4000	.10
581-08051A681J4	08051A681J4T2A	COG	680	100	5	.25	.21	.15	.12	4000	.09
581-08051A102J4	08051A102J4T2A	COG	1000	100	5	.39	.32	.23	.19	4000	.13
581-08055C102K4	08055C102K4T2A	X7R	1000	50	10	.23	.19	.14	.12	4000	.08
581-08055C222K4	08055C222K4T2A	X7R	2200	50	10	.23	.19	.14	.12	4000	.08
581-08055C332K4	08055C332K4T2A	X7R	3300	50	10	.23	.19	.14	.12	4000	.08
581-08055C472K4	08055C472K4T2A	X7R	4700	50	10	.23	.19	.14	.12	4000	.08
581-08055C682K4	08055C682K4T2A	X7R	6800	50	10	.23	.19	.14	.12	4000	.08
581-08051C103K4	08051C103K4T2A	X7R	10000	100	10	.23	.19	.14	.12	4000	.08
581-08055C103K4	08055C103K4T2A	X7R	10000	50	10	.23	.19	.14	.12	4000	.08
581-08051C223K4	08051C223K4T2A	X7R	22000	100	10	.26	.22	.16	.13	4000	.09
581-08055C223K4	08055C223K4T2A	X7R	22000	50	10	.26	.22	.16	.13	4000	.09
581-08055C333K4	08055C333K4T2A	X7R	33000	50	10	.26	.22	.16	.13	4000	.09
581-08051C473K4	08051C473K4T2A	X7R	47000	100	10	.28	.17	.14	.10	2000	.07
581-08055C473K4	08055C473K4T2A	X7R	47000	50	10	.26	.22	.16	.13	4000	.09
581-08055C683K4	08055C683K4T2A	X7R	68000	50	10	.35	.29	.21	.18	4000	.12

MOUSER STOCK NO.	AVX Part Number	Temp Coeff.	Value pF	Volt	Tol. ± %	Price Each				Reel Qty	Price Per Piece
						1	100	500	1000		
<b>Style 0805 (Cont.)</b>											
581-08051C104K4	08051C104K4T2A	X7R	0.1µF	100	10	.34	.20	.17	.12	2000	.09
581-08055C104K4	08055C104K4T2A	X7R	0.1µF	50	10	.36	.30	.22	.18	4000	.13
581-08055C224K4	08055C224K4T2A	X7R	0.22µF	50	10	.36	.21	.18	.12	4000	.11
581-08053C334K4	08053C334K4T2A	X7R	0.33µF	25	10	.67	.40	.34	.24	2000	.17
581-08053C474K4	08053C474K4T2A	X7R	0.47µF	25	10	.67	.40	.34	.24	2000	.17
581-08053C105K4	08053C105K4T2A	X7R	1.0µF	25	10	2.59	1.56	1.30	.91	2000	.65
581-08052C105K4	08052C105K4T2A	X7R	1.0µF	10	10	1.02	.61	.51	.41	2000	.31
581-08055F102K4	08055F102K4T2A	X8R	1000	50	10	.26	.22	.163	.11	4000	.078
581-08055F103K4	08055F103K4T2A	X8R	10000	50	10	.30	.24	.175	.11	4000	.078
581-08055F333K4	08055F333K4T2A	X8R	33000	50	10	.40	.33	.245	.17	4000	.11
581-08055F473K4	08055F473K4T2A	X8R	47000	50	10	.40	.33	.245	.17	4000	.11
581-08055F104K4	08055F104K4T2A	X8R	0.1µF	50	10	.42	.34	.25	.21	4000	.101

MOUSER STOCK NO.	AVX Part Number	Temp Coeff.	Value pF	Volt	Tol. ± %	Price Each				Reel Qty	Price Per Piece
						1	100	500	1000		
<b>Style 1206</b>											
581-12067A100J4	12067A100J4T2A	COG	10	500	5	1.02	.84	.61	.51	4000	.48
581-12061C102K4	12061C102K4T2A	X7R	1000	100	10	.31	.26	.19	.16	4000	.09
581-12065C102K4	12065C102K4T2A	X7R	1000	50	10	.31	.26				