

# AVX 0201, 0402, 0603, 0805 Capacitors



RoHS Compliant This product is RoHS compliant.

## AVX GX SERIES ULTRA BROAD BAND CAPACITOR

### Features:

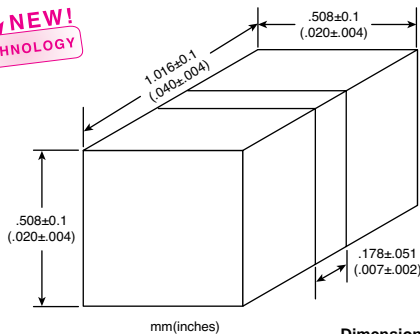
- Ultra-Broadband performance
- Ultra-Low Insertion Loss
- X5R & X7S Characteristics
- Excellent Return Loss

### Applications:

- Semi-Conductor Data Communications
- Receiver Optical Sub-Assemblies
- Transimpedance Amplifier
- Test Equipment Manufactures

### Electrical Specifications:

- Capacitance: 0.1  $\mu\text{F} \pm 10\%$ , 0.1  $\mu\text{F} \pm 20\%$
- Voltage Rating/Operating Temperature: 16 VDC @ 85°C; 10 VDC @ 125°C
- Dielectric Withstanding Voltage: 250% WVDC
- Insulation Resistance: 10,000 Meg Ohms @ 25°C; 1,000 Meg Ohms @ 125°C
- Temperature Coefficient: 16 VDC X5R ( $\pm 15\%$ ); 10 VDC X7S ( $\pm 22\%$ )



Dimensions: mm (in.)

### Style 0402

• Temperature coefficient: COG

For quantities of 10,000 and up, call for quote.

MOUSER STOCK NO.	AVX Part No.	Cap. ( $\mu\text{F}$ )	Tol. (pF)	Price Each			Reel Qty.	Piece Price
				1	50	100		
581-GX02YD104KAT2	GX02YD104KAT2-500	0.1	10%				500	

### Dimensions: mm (in.)

	0201*	0402 *	0603 *	0805 *
L	0.60 $\pm$ 0.05 (.023 $\pm$ .002)	1.00 $\pm$ 0.1 (.039 $\pm$ .004)	1.60 $\pm$ 0.1 (.063 $\pm$ .004)	2.01 $\pm$ 0.1 (.079 $\pm$ .004)
W	0.325 $\pm$ 0.050 (.0128 $\pm$ .002)	0.55 $\pm$ 0.07 (.022 $\pm$ .003)	0.81 $\pm$ 0.1 (.032 $\pm$ .004)	1.27 $\pm$ 0.1 (.050 $\pm$ .004)
T	0.225 $\pm$ 0.050 (.009 $\pm$ .002)	0.40 $\pm$ 0.1 (.016 $\pm$ .004)	0.63 $\pm$ 0.1 (.025 $\pm$ .004)	0.93 $\pm$ 0.2 (.036 $\pm$ .008)
B <sup>1</sup>	.10 $\pm$ 0.10 (.004 $\pm$ .004)	.00 $\pm$ 0.1/-0 (.000 $\pm$ .004/-0)	0.35 $\pm$ 0.15 (.014 $\pm$ .006)	0.30 $\pm$ 0.1 (.012 $\pm$ .004)
B <sup>2</sup>	0.15 $\pm$ 0.05 (.006 $\pm$ .002)	0.20 $\pm$ 0.1 (.008 $\pm$ .004)	0.35 $\pm$ 0.15 (.014 $\pm$ .006)	0.30 $\pm$ 0.1 (.012 $\pm$ .004)

\* Mount black side up.

## AVX ACCU-P® THIN-FILM RF / MICROWAVE CAPACITORS

### Features:

- Minimal batch to batch variability of parameters at high frequency
- Low ESR, high Q, low capacitance
- Inspected, test and quality control procedures in accordance with ISO 9001, CECC, IECQ, USA MIL Standards guarantee product of the highest quality
- Preferred device in R & D labs and production environment where hand soldering is used

### Electrical Specifications:

- Temperature range: -55°C to +125°C
- Temperature coef.: 0  $\pm$ 30ppm/°C dielectric code "J"
- Cap. measurement: 1Mhz, 1Vrms
- Insulation resistance:  $\geq 10^{11}\Omega$  ( $\geq 10^{10}\Omega$  for 0201 and 0402 size)
- Proof voltage: 2.5 U<sub>P</sub> for 5 secs.
- Aging characteristics: Zero
- Dielectric absorption: 0.01%

### Applications:

- Cellular communications
- CT2/PCN
- Satellite, cable TV
- RF amplifiers
- GPS
- Vehicle location systems
- Vehicle alarm systems
- Paging
- Military communications
- Radar systems
- Video switching
- Test and measurements
- Filters
- VCOs
- Matching networks

### Style 0201

• Temperature coefficient: COG

For quantities of 10,000 and up, call for quote.

MOUSER STOCK NO.	AVX Part No.	Cap. (pF)	Volt. (DC)	Tol. (pF)	Price Each			Reel Qty.	Piece Price
					1	100	500		
<b>Style 0201</b>									
581-02013J0R8BBS	02013J0R8BBS	0.8	25	0.1				5000	
581-02013J0R9BBS	02013J0R9BBS	0.9	25	0.1				5000	
581-02013J1R8BBS	02013J1R8BBS	1.8	25	0.1				5000	
581-02013J2R0BBS	02013J2R0BBS	2.0	25	0.1				5000	
581-02013J2R2BBS	02013J2R2BBS	2.2	25	0.1				5000	
581-02013J2R4BBS	02013J2R4BBS	2.4	25	0.1				5000	
581-02013J2R7BBS	02013J2R7BBS	2.7	25	0.1				5000	

### Style 0402

581-04023J1R0BBS	04023J1R0BBS	1.0	25	0.1				5000	
581-04023J1R5BBS	04023J1R5BBS	1.5	25	0.1				5000	
581-04023J1R6BBS	04023J1R6BBS	1.6	25	0.1				5000	
581-04023J1R8BBS	04023J1R8BBS	1.8	25	0.1				5000	
581-04023J2R2BBS	04023J2R2BBS	2.2	25	0.1				5000	
581-0402J2R8CBS	0402J2R8CBS	2.8	10	0.25				5000	
581-04023J3R0BBS	04023J3R0BBS	3.0	25	0.1				5000	
581-04023J3R3BBS	04023J3R3BBS	3.3	25	0.1				5000	
581-0402YJ3R6BBS	0402YJ3R6BBS	3.6	25	0.1				5000	
581-04023J3R9BBS	04023J3R9BBS	3.9	25	0.1				5000	
581-0402YJ3R9BBS	0402YJ3R9BBS	3.9	16	0.1				5000	
581-0402ZJ4R3CBS	0402ZJ4R3CBS	4.3	10	0.25				5000	
581-04023J4R7BBS	04023J4R7BBS	4.7	25	0.1				5000	
581-0402ZJ4R7CBS	0402ZJ4R7CBS	4.7	10	0.25				5000	
581-04023J5R6BBS	04023J5R6BBS	5.6	25	0.1				5000	
581-04023J6R8BBS	04023J6R8BBS	6.8	25	0.1				5000	
581-04023J7R5BBS	04023J7R5BBS	7.5	25	0.1				5000	
581-0402ZJ8R2BBS	0402ZJ8R2BBS	8.2	10	0.1				5000	
581-0402YJ100FBS	0402YJ100FBS	10	16	1%				5000	
581-0402ZJ120FBS	0402ZJ120FBS	12	10	1%				5000	
581-0402ZK180FBS	0402ZK180FBS	18	10	1%				5000	

### Style 0603

581-06035J0R2ABS	06035J0R2ABSTR	0.2	50	0.05				3000	
581-06035J0R2BBS	06035J0R2BBSTR	0.2	50	0.1				3000	
581-06031J0R3ABS	06031J0R3ABSTR	0.3	100	0.05				3000	
581-06035J0R3BBS	06035J0R3BBSTR	0.3	50	0.1				3000	
581-06035J0R3PBS	06035J0R3PBSTR	0.3	50	0.02				3000	
581-06035J0R4BBS	06035J0R4BBSTR	0.4	50	0.1				3000	
581-06035J0R5BBS	06035J0R5BBSTR	0.5	50	0.1				3000	

• Temperature coefficient: COG

For quantities of 10,000 and up, call for quote.

<b>Style 0603 (Cont.)</b>									
581-06035J0R7PBS	06035J0R7PBSTR	0.7	50	0.02				3000	
581-06035J0R7BBS	06035J0R7BBSTR	0.7	50	0.1				3000	
581-06035J0R8BBS	06035J0R8BBSTR	0.8	50	0.1				3000	
581-06035J0R9PBS	06035J0R9PBSTR	0.9	50	0.02				3000	
581-06035J1R0BBS	06035J1R0BBSTR	1.0	50	0.1				3000	
581-06035J1R0PBS	06035J1R0PBSTR	1.0	50	0.02				3000	
581-06035J1R1BBS	06035J1R1BBSTR	1.1	50	0.1				3000	
581-06035J1R2PBS	06035J1R2PBSTR	1.2	50	0.02				3000	
581-06035J1R5ABS	06035J1R5ABSTR	1.5	50	0.1				3000	
581-06035J1R6ABS	06035J1R6ABSTR	1.6	50	0.05				3000	
581-06035J1R8BBS	06035J1R8BBSTR	1.8	50	0.1				3000	
581-06035J2R0ABS	06035J2R0ABSTR	2.0	50	0.05				3000	
581-06035J2R0BBS	06035J2R0BBSTR	2.0	50	0.1				3000	
581-06035J2R2ABS	06035J2R2ABSTR	2.2	50	0.05				3000	
581-06035J2R2BBS	06035J2R2BBSTR	2.2	50	0.1				3000	
581-06035J2R4BBS	06035J2R4BBSTR	2.4	50	0.1				3000	
581-06035J2R7BBS	06035J2R7BBSTR	2.7	50	0.1				3000	
581-06035J3R0ABS	06035J3R0ABSTR	3.0	50	0.05				3000	
581-06035J3R0BBS	06035J3R0BBSTR	3.0	50	0.1				3000	
581-06035J3R3ABS	06035J3R3ABSTR	3.3	50	0.05				3000	
581-06035J3R3BBS	06035J3R3BBSTR	3.3	50	0.1				3000	
581-06035J3R9BBS	06035J3R9BBSTR	3.9	50	0.1				3000	
581-06035J4R3BBS	06035J4R3BBSTR	4.3	50	0.1				3000	
581-06035J4R7BBS	06035J4R7BBSTR	4.7	50	0.1				3000	
581-06035J4R7ABS	06035J4R7ABSTR	4.7	50	0.05				3000	
581-06035J5R6BBS	06035J5R6BBSTR	5.6	50	0.1				3000	
581-06035J6R8BBS	06035J6R8BBSTR	6.8	50	0.1				3000	
581-06035J8R2BBS	06035J8R2BBSTR	8.2	50	0.1				3000	
581-06035J100FBS	06035J100FBSTR	10	50	1%				3000	
581-06033J100FBS	06033J100FBSTR	10	25	1%				3000	
581-06035J120FBS	06035J120FBSTR	12	50	1%				3000	
581-06033J130FBS	06033J130FBSTR	13	25	1%				3000	
581-06033J160FBS	06033J160FBSTR	16	25	1%				3000	

### Style 0805

581-08055J1R5BTT	08055J1R5BTTTR	1.5	50	0.1				3000	
581-08055J1R8BTT	08055J1R8BTTTR	1.8	50	0.1				3000	
581-08055J2R0BTT	08055J2R0BTTTR	2	50	0.1				3000	
581-08055J2R2BTT	08055J2R2BTTTR	2.2	100	0.1				3000	
581-08055J2R2BTT	08055J2R2BTTTR	2.2	50	0.1				3000	
581-08055J2R7BTT	08055J2R7BTTTR	2.7	50	0.1				3000	
581-08055J3R0BTT	08055J3R0BTTTR	3	50	0.1				3000	
581-08055J3R3BTT	08055J3R3BTTTR	3.3	100	0.1				3000	
581-08055J3R3ABTT	08055J3R3ABTTTR	3.3	50	0.05				3000	
581-08055J3R9BTT	08055J3R9BTTTR	3.9	100	0.1				3000	
581-08055J3R9BTT	08055J3R9BTTTR	3.9	50	0.1				3000	
581-08055J4R7ABTT	08055J4R7ABTTTR	4.7	100	0.05				3000	
581-08055J4R7BTT	08055J4R7BTTTR	4.7	100	0.1				3000	
581-08055J5R6BTT	08055J5R6BTTTR	5.6	100	0.1				3000	
581-08055J5R6BTT	08055J5R6BTTTR	5.6	50	0.1					