

# Glass Capacitors

## CY06, 07, 08 (QPL to MIL-C-11272/13/14/15)



### APPLICATIONS

These precision miniature glass capacitors, AVX style CY0, meet or exceed all requirements of MIL-C-11272. Constructed of a fused monolithic capacitive element in a rectangular case with gold-plated radial Dumet leads, this series permits high packaging efficiency for printed circuit applications where extremely stable, low-loss capacitors are required.

### PERFORMANCE CHARACTERISTICS

**Tolerance:** Available tolerances for each value of capacitance are shown in the ordering information table. For codes, refer to the Part Numbers paragraph.

**Temperature Coefficient:**  $+140 \pm 25$  ppm/ $^{\circ}\text{C}$  at 100kHz. TC will track and retrace to within  $\pm 5$  ppm. Capacitance drift is less than 0.1% or 0.1pF, whichever is greater.

**Voltage Coefficient:** Zero.

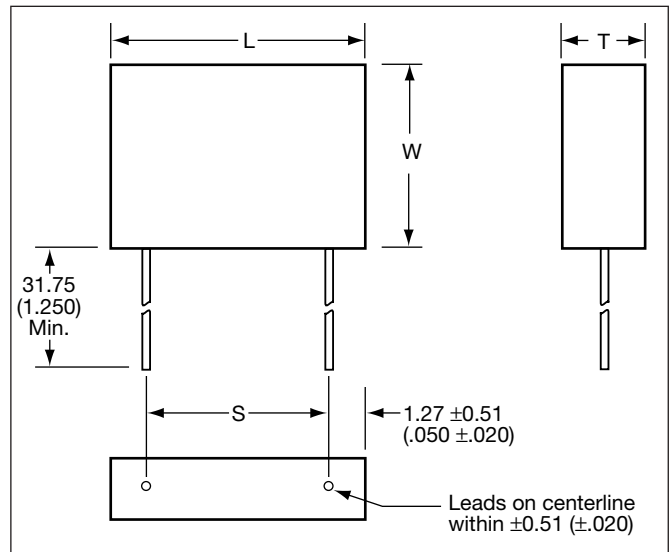
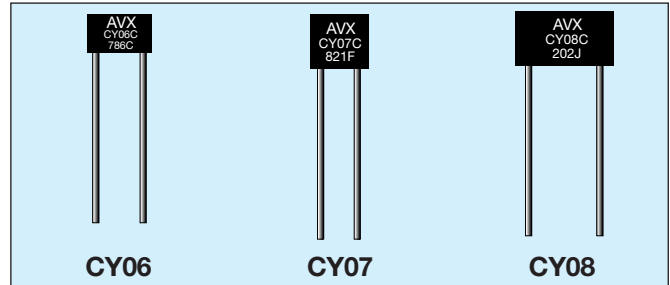
**Losses:** Extremely low, and remain relatively low at elevated temperatures. Dissipation factor at 1kHz and  $25^{\circ}\text{C}$  is less than 0.001 for values greater than 100pF and less than 0.002 for values of 100pF and below.

**Life:** After 2,000 hours at  $125^{\circ}\text{C}$  with 150% of rated voltage applied, capacitance change is less than 0.5% or 0.5 pF; dissipation factor is less than 0.0025 for values above 100 pF and less than 0.0045 for values of 100 pF and below.

**Insulation Resistance:** Greater than 100,000 megohms at  $25^{\circ}\text{C}$ ; greater than 10,000 megohms at  $125^{\circ}\text{C}$ .

**Voltage/Temperature Rating:** 300 WVDC over the temperature range of  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  with no derating required.

Additional performance details are given in the AVX "Performance Characteristics of Multilayer Glass Dielectric Capacitors" technical paper.



### DIMENSIONS:

millimeters (inches)

Case Size	L $\pm 0.13$ ( $\pm 0.005$ )	W $\pm 0.25$ ( $\pm 0.010$ )	T $\pm 0.13$ ( $\pm 0.005$ )	S $\pm 0.51$ ( $\pm 0.020$ )	Weight (Grams)
CY06	7.62 (0.300)	5.08 (0.200)	2.92 (0.115)	5.08 (0.200)	.3 - .4
CY07	7.62 (0.300)	7.62 (0.300)	2.92 (0.115)	5.08 (0.200)	.4 - .5
CY08	12.70 (0.500)	7.62 (0.300)	2.92 (0.115)	10.16 (0.400)	.7 - .8

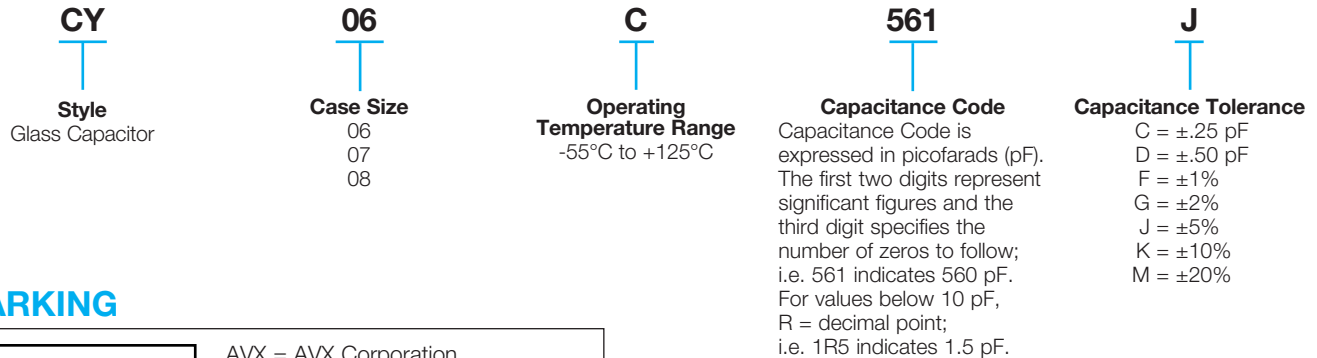
**Note:** All leads are 24 AWG,  $0.51 \pm .05$  ( $0.020 \pm 0.002$ ) diameter. Leads are solderable and weldable gold-plated Dumet, per MIL-STD-1276, Type D.

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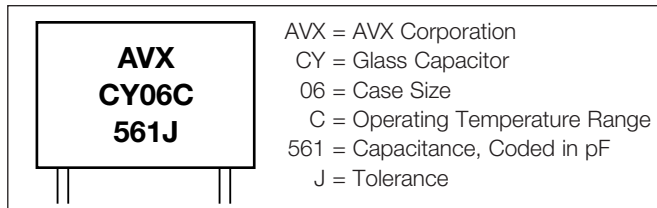
## Part Numbers and Ordering Information



### HOW TO ORDER



### MARKING



### RATINGS & PART NUMBER REFERENCE (Standard Values)

Military Type Designation	Capacitance (pF)	Tolerances Available	DC Working Voltage
<b>CY06</b>			
CY06C1R0_	1.0	C, D	300
CY06C1R5_	1.5	C, D	300
CY06C2R2_	2.2	C, D	300
CY06C2R7_	2.7	C, D	300
CY06C3R0_	3.0	C, D	300
CY06C3R3_	3.3	C, D	300
CY06C3R6_	3.6	C, D	300
CY06C3R9_	3.9	C, D	300
CY06C4R3_	4.3	C, D	300
CY06C4R7_	4.7	C, K	300
CY06C5R1_	5.1	C, J, K	300
CY06C5R6_	5.6	C, J, K	300
CY06C6R2_	6.2	C, J, K	300
CY06C6R8_	6.8	C, J, K	300
CY06C7R5_	7.5	C, J, K	300
CY06C8R2_	8.2	C, J, K	300
CY06C9R1_	9.1	C, J, K	300
CY06C100_	10	C, J, K, M	300
CY06C110_	11	C, J, K, M	300
CY06C120_	12	C, J, K, M	300
CY06C130_	13	C, G, J, K, M	300
CY06C150_	15	C, G, J, K, M	300
CY06C160_	16	C, G, J, K, M	300
CY06C180_	18	C, G, J, K, M	300
CY06C200_	20	C, G, J, K, M	300
CY06C220_	22	C, G, J, K, M	300
CY06C240_	24	C, G, J, K, M	300
CY06C270_	27	F, G, J, K, M	300
CY06C300_	30	F, G, J, K, M	300
CY06C330_	33	F, G, J, K, M	300
CY06C360_	36	F, G, J, K, M	300
CY06C390_	39	F, G, J, K, M	300
CY06C430_	43	F, G, J, K, M	300
CY06C470_	47	F, G, J, K, M	300
CY06C510_	51	F, G, J, K, M	300
CY06C560_	56	F, G, J, K, M	300
CY06C620_	62	F, G, J, K, M	300
CY06C680_	68	F, G, J, K, M	300
CY06C750_	75	F, G, J, K, M	300
CY06C820_	82	F, G, J, K, M	300

— Add letter for tolerance code above lines.

Military Type Designation	Capacitance (pF)	Tolerances Available	DC Working Voltage
<b>CY06 (cont)</b>			
CY06C910_	91	F, G, J, K, M	300
CY06C101_	100	F, G, J, K, M	300
CY06C111_	110	F, G, J, K, M	300
CY06C121_	120	F, G, J, K, M	300
CY06C131_	130	F, G, J, K, M	300
CY06C151_	150	F, G, J, K, M	300
CY06C161_	160	F, G, J, K, M	300
CY06C181_	180	F, G, J, K, M	300
CY06C201_	200	F, G, J, K, M	300
CY06C221_	220	F, G, J, K, M	300
CY06C241_	240	F, G, J, K, M	300
CY06C271_	270	F, G, J, K, M	300
CY06C301_	300	F, G, J, K, M	300
CY06C331_	330	F, G, J, K, M	300
CY06C361_	360	F, G, J, K, M	300
CY06C391_	390	F, G, J, K, M	300
CY06C431_	430	F, G, J, K, M	300
CY06C471_	470	F, G, J, K, M	300
CY06C511_	510	F, G, J, K, M	300
CY06C561_	560	F, G, J, K, M	300
<b>CY07</b>			
CY07C621_	620	F, G, J, K, M	300
CY07C681_	680	F, G, J, K, M	300
CY07C751_	750	F, G, J, K, M	300
CY07C821_	820	F, G, J, K, M	300
CY07C911_	910	F, G, J, K, M	300
CY07C102_	1,000	F, G, J, K, M	300
<b>CY08</b>			
CY08C112_	1,100	F, G, J, K, M	300
CY08C122_	1,200	F, G, J, K, M	300
CY08C132_	1,300	F, G, J, K, M	300
CY08C152_	1,500	F, G, J, K, M	300
CY08C162_	1,600	F, G, J, K, M	300
CY08C182_	1,800	F, G, J, K, M	300
CY08C202_	2,000	F, G, J, K, M	300
CY08C222_	2,200	F, G, J, K, M	300
CY08C242_	2,400	F, G, J, K, M	300

— Add letter for tolerance code above lines.