

Glass Composite Capacitors



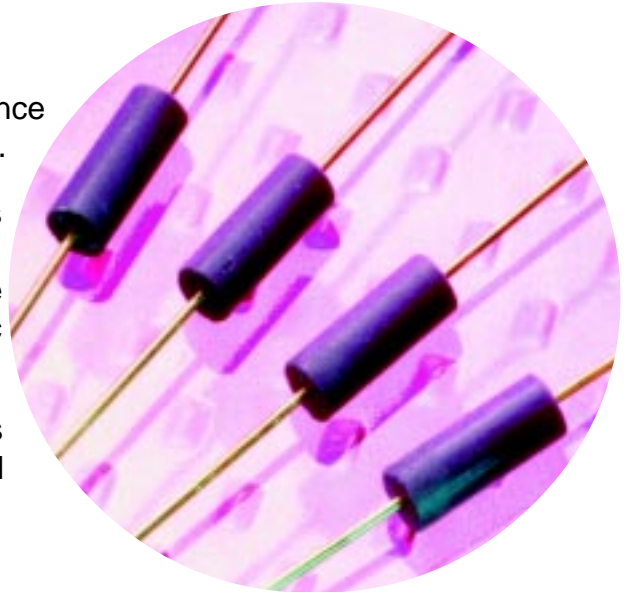
CY 31 Series

GENERAL DESCRIPTION:

AVX has introduced a series of extremely tight tolerance low loss capacitors utilizing a glass composite insert.

The CY31 Series comes in axial configuration and is composed of a low loss glass composite dielectric, gold plated leads and a silicone molded case. These devices exhibit zero piezoelectric noise, low dielectric absorption (<0.01%) and zero aging rate.

The parts are ideally suited for low loss applications such as reference standards, low loss RF filters and sample/hold capacitors.



PERFORMANCE CHARACTERISTICS

Capacitance Range	0.5pF - 33pF						
Standard Capacitance Values	0.5	1	2.2	4.7	8.2	18	33
	0.6	1.2	2.7	5.6	10	22	
	0.7	1.5	3.3	6.8	12	24	
	0.8	1.8	3.9	7.5	15	27	
TOLERANCES*	0.5pF to 12pF $\pm 0.25\text{pF}$ 13pF to 24pF $\pm 2\%$, $\pm 5\%$ 27pF to 33pF 1%, 2%, 5%						
VOLTAGE RATING	25 VDC						
INSULATION RESISTANCE	$>1 \times 10^{11}$ OHM						
TEMPERATURE COEFFICIENT	0 ± 30 PPM/ $^{\circ}\text{C}$						
DISSIPATION FACTOR	<0.001						
OPERATING TEMPERATURE RANGE	-55°C to $+125^{\circ}\text{C}$						
DIELECTRIC ABSORPTION	$<0.01\%$						

* Special tolerances, matched pairs available.

APPLICATIONS:

Sample/Hold Circuits
Capacitor Reference Standards
Low Loss RF Filters
Voltage Controlled Oscillators
Matching Networks

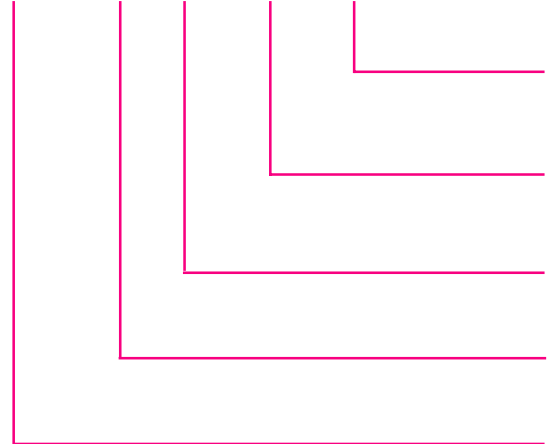
FEATURES:

Molded Case Size
Tight Tolerance
Zero Aging
Low Inductance 16 Mil Leads



PART NUMBER IDENTIFICATION:

CY 31 3 A 100 D



Tolerance Code
 C = $\pm 0.25\text{pF}$ D = $\pm 0.5\text{pF}$ F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$

Capacitance Code
 2 significant digits + number of zeros.
 For values $< 10\text{pF}$, letter R denotes decimal point.
 E.g. 100 = 10pF , 5R1 = 5.1pF

Temperature Coefficient
 A = $\pm 30\text{ppm}/^\circ\text{C}$ (-55°C to $+125^\circ\text{C}$)

Voltage Code
 3 = 25V

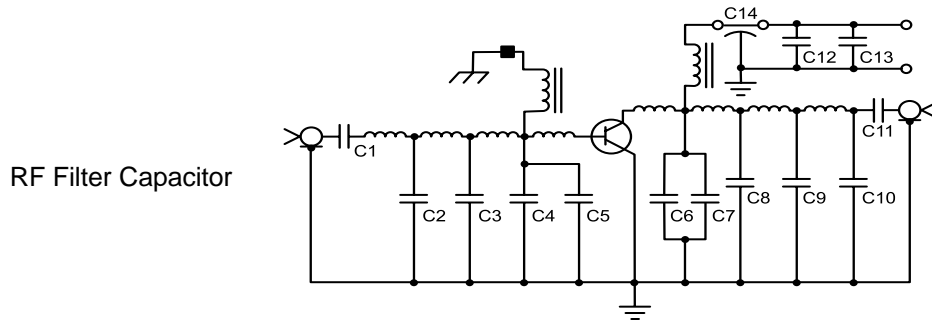
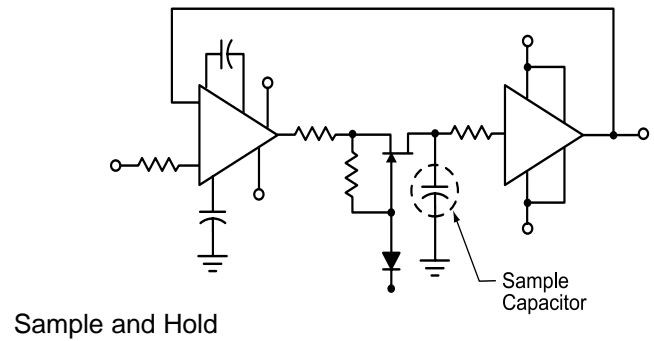
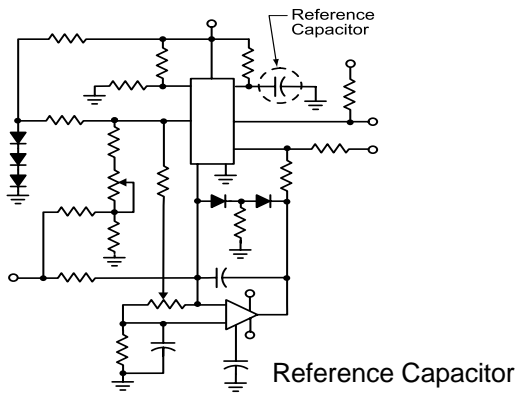
Style/Size

Packaging information: Bulk in groups of 25 pieces. Individual packaging available upon request.

CASE SIZE	L ± 0.010 (.254)	D ± 0.010 (.254)	LEAD DIAMETER +.004 (.10) -.001 (.03)	WEIGHT GRAMS (TYPICAL)
31	0.240 (6.09)	0.090 (2.29)	0.016 (.41)	.2

Dimensions: Inches (millimeters)

TYPICAL APPLICATIONS



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