Thin-Film RF/Microwave Capacitor Technology

Accu-P® Series

Ultra-Miniature 01005 Size







ACCU-P® TECHNOLOGY

The use of silicon oxide, a very low - loss dielectric material, in conjunction with highly conductive electrode metals, results in low ESR and high Q. These high - frequency characteristics change at a slower rate with increasing frequency than for ceramic microwave capacitors.

ACCU-P® meets the fast - growing demand for low - loss (high - Q) capacitors for use in surface mount technology, especially for the wireless communications market at frequencies up to and above 5.8GHz.

ACCU-P® is currently unique in its ability to offer very low capacitance values (0.05 pF) and ultra tight capacitance tolerances (±0.01 pF).

ACCU-P® TECHNOLOGY

- RF Modules
- Mobile communications
- Statelite TV
- Global positioning systems
- Filters
- VCO's
- Matching Networks

FEATURES

- · Ultra Miniature standard 01005 chip size.
- Ultra tight capacitance tolerances (±0.01pF).
- · Low ESR and high Q at VHF, UHF and microwave frequencies.
- TC ±30, ±60ppm/°C.
- · Nickel/Solder coated terminations provide excellent solderability and leach resistance.
- High insulation resistance: IR ≥ 1010 Ohm.
- Orientation provides high SRF uniformity.
- Repeatable CEFF, ESR and Q vs. Frequency parameters, both lot to lot and within lots, for increased production yields.

HOW TO ORDER

C005 X XXX X В S TR Lead Free Series Voltage Temperature Capacitance Tolerance Accu-P **Packaging** Coefficient Termination Code 500 pc Reel TR/10K = 10,000 pc reel TR/20K = 20,000 pc reel

P/N EXAMPLE: C 0 0 5 Y K 1 R 0 A B S T R

ACCU-P® TECHNOLOGY

Finished parts are tested for standard electrical parameters and visual / mechanical characteristics.

Each production lot is 100% evaluated for:

- · Capacitance
- O Factor
- DWV at 12.5xV_{RATED}

Each production lot is evaluated on a sample basis for:

- Dimensions
- Insulation Resistance
- Breakdown Voltage
- **ESR**
- Solderability

In addition, production is periodically evaluated for:

- Dimensions
- Insulation Resistance
- · Breakdown Voltage
- ESR
- · Solderability

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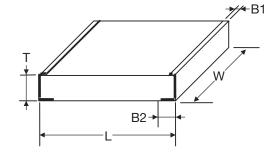
ACCU-P® 01005 CAPACITANCE RANGE

Capacitance [pF]	Part Number	Tolerances Z = ±0.01pF P = ±0.02pF Q = ±0.03pF A = ±0.05pF	TC J = ±30ppm/°C K = ±60pFppm/°C	Voltage (V)
0.05	C005YJR05_BSTR	Z, P, Q, A	J	16
0.10	C005YJ0R1_BSTR	Z, P, Q, A	J	16
0.15	C005YJR15_BSTR	Z, P, Q, A	J	16
0.20	C005YJ0R2_BSTR	Z, P, Q, A	J	16
0.25	C005YJR25_BSTR	Z, P, Q, A	J	16
0.30	C005YJ0R3_BSTR	Z, P, Q, A	J	16
0.35	C005YJR35_BSTR	Z, P, Q, A	J	16
0.40	C005YJ0R4_BSTR	Z, P, Q, A	J	16
0.45	C005YJR45_BSTR	Z, P, Q, A	J	16
0.50	C005YJ0R5_BSTR	Z, P, Q, A	J	16
0.55	C005YJR55_BSTR	P, Q, A	J	16
0.60	C005YJ0R6_BSTR	P, Q, A	J	16
0.65	C005YJR65_BSTR	P, Q, A	J	16
0.70	C005YJ0R7_BSTR	P, Q, A	J	16
0.75	C005YJR75_BSTR	P, Q, A	K	16
0.80	C005YK0R8_BSTR	P, Q, A	K	16
0.85	C005YKR85_BSTR	P, Q, A	K	16

Capacitance [pF]	Part Number	Tolerances Z = ±0.01pF P = ±0.02pF Q = ±0.03pF A = ±0.05pF	TC J = ±30ppm/°C K = ±60pFppm/°C	Voltage (V)
0.90	C005YK0R9_BSTR	P, Q, A	K	16
0.95	C005YKR95_BSTR	P, Q, A	K	16
1.00	C005YK1R0_BSTR	P, Q, A	K	16
1.10	C005YK1R1_BSTR	P, Q, A	K	16
1.20	C005YK1R2_BSTR	P, Q, A	K	16
1.30	C005YK1R3_BSTR	P, Q, A	K	16
1.40	C005YK1R4_BSTR	P, Q, A	K	16
1.50	C005YK1R5_BSTR	P, Q, A	K	16
1.60	C005YK1R6_BSTR	P, Q, A	K	16
1.70	C005YK1R7_BSTR	P, Q, A	K	16
1.80	C005YK1R8_BSTR	P, Q, A	K	16
1.90	C005YK1R9_BSTR	P, Q, A	K	16
2.00	C005YK2R0_BSTR	P, Q, A	K	16
2.10	C005YK2R1_BSTR	P, Q, A	K	16
2.20	C005YK2R2_BSTR	P, Q, A	K	16
2.30	C005YK2R3_BSTR	P, Q, A	K	16
2.40	C005YK2R4_BSTR	P, Q, A	K	16

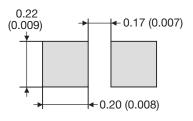
Intermediate capacitance values are available

DIMENSIONS: mm (inches)



L	0.405 ± 0.020
	(0.016 ± 0.001)
W	0.215 ± 0.020
	(0.0085 ± 0.001)
Т	0.145 ± 0.020
	(0.006 ± 0.001)
В	Top (B1): 0.0 +0.10/-0.0
	(0.0 +0.004/-0.0)
	Bottom (B2): 0.10 ± 0.03
	(0.004 ± 0.001)

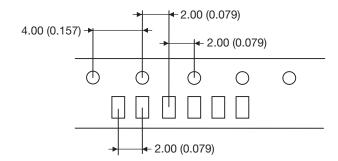
RECOMMENDED PAD LAYOUT: mm (inches)



PACKAGING SPECIFICATION: mm (inches)

Standard Packaging: 5,000 / 10,000 / 20,000pcs in 4" / 7" reels

Materials: Reel – Polystyrene Tape – Paper: 8.00 (0.315) Component pitch: 2.00 (0.079)



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Kyocera AVX:

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C005YJ0R1PBSTR C005YJ0R2PBSTR C005YJ0R3PBSTR C005YJ0R4PBSTR C005YJ0R5PBSTR
C005YJ0R6PBSTR C005YJ0R7PBSTR C005YJR05PBSTR C005YK0R8PBSTR C005YK0R9PBSTR
C005YK1R0PBSTR C005YK1R2QBSTR C005YK1R5QBSTR C005YK1R8QBSTR C005YK2R2QBSTR
C005YK1R0ABSTR C005YJ0R5BBSTR C005YK1R8ABSTR C005YK2R0ABSTR C005YK2R1ABSTR
C005YJ0R6ABSTR C005YJR75PBSTR C005YK1R2ABSTR C005YJ0R1QBSTR C005YJ0R2ZBSTR
C005YJ0R1ZBSTR C005YJR25PBSTR C005YJR55PBSTR C005YJ0R5ABSTR C005YJ0R8ABSTR
C005YK1R5ABSTR C005YJ0R7ABSTR C005YK1R6ABSTR C005YK2R4ABSTR
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