

Surface Mount RF/Microwave Low ESR NPO Ceramic Capacitors
U Series, Specifications, & 0402 Pricing



Part Number Determination

08051U100JAT2A								
0805	1	U	100	J	A	T	2	A
SIZE	VOLT	DIELECTRIC	CAPACITANCE	TOLERANCE	FAILURE RATE	TERMINATION	PKGING	SPECIAL CODE
0402	3=25V	U=Ultra Low ESR NPO	2 significant digits + # of zeros 100=10pF 102=1000pF 105=1uF	B=±0.1pF C=±0.25pF D=±0.5pF	A=N/A	T=Plated Ni and Solder	2=7" Reel 4=13" Reel 9=Bulk	A=Std
0603	5=50V			F=±1%				
0805	1=100V			G=±2%				
1210	2=200V			J=±5% K=±10% M=±20%				

Electrical Characteristics

Capacitance Range: 0402-0.2pF-15pF
0603-1.0pF-47pF
0805-1.0pF-160pF

Temperature Coefficient: 0±30ppm/°C

Operating Temperature: -55 to +125°C

Insulation Resistance (IR):

10¹² Ω min. @ 25°C and rated WVDC

10¹¹ Ω min. @ 125°C and rated WVDC

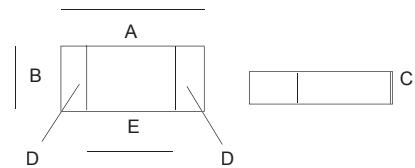
Dielectric Work. Volt: 250% of rated WVDC

Terminations: Plated Ni and Solder



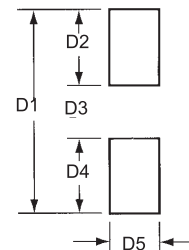
Package Dimensions (in/mm)

Size	A	B	C	D	E
0402	0.039±0.004 (1.00±0.1)	0.020±0.004 (0.50±0.1)	0.024 max (0.6) max	N/A	N/A
0603	0.060±0.010 (1.52±0.25)	0.030±0.010 (0.76±0.25)	0.036 max (0.91) max	0.010±0.005 (0.25±0.13)	0.030 min (0.76) min
0805	0.079±0.008 (2.01±0.20)	0.049±0.008 (1.25±0.20)	0.040±0.005 (1.02±0.127)	0.020±0.010 (0.51±0.255)	0.020 min (0.51) min
1210	0.126±0.008 (3.2±0.20)	0.098±0.008 (2.49±0.20)	0.050±0.005 (1.27±0.127)	0.025±0.015 (0.635±0.381)	0.040 min (1.02) min



Land Pattern (mm/in)

Case Size	D1	D2	D3	D4	D5
0402 Reflow	1.70 (0.07)	0.60 (0.02)	0.50 (0.02)	0.60 (0.02)	0.50 (0.02)
0603 Reflow	2.30 (0.09)	0.80 (0.03)	0.70 (0.03)	0.80 (0.03)	0.75 (0.03)
0603 Wave	3.10 (0.12)	1.50 (0.06)	0.70 (0.03)	1.20 (0.05)	0.75 (0.03)
0805 Reflow	3.00 (0.12)	1.00 (0.04)	1.00 (0.04)	1.00 (0.04)	1.25 (0.05)
0805 Wave	4.00 (0.15)	1.50 (0.06)	1.00 (0.04)	1.50 (0.06)	1.25 (0.05)
1206 Reflow	4.00 (0.16)	1.00 (0.04)	2.00 (0.09)	1.00 (0.04)	1.60 (0.06)
1206 Wave	5.00 (0.19)	1.50 (0.06)	2.00 (0.09)	1.50 (0.06)	1.60 (0.06)



Mfg Specs

- Go to www.garrettelec.com
- Enter part number or find by description
- Select "S", select "manufacturer's specifications"