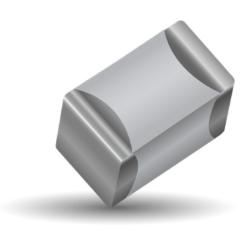
RF/Microwave Capacitors RF/Microwave Multilayer Capacitors (MLC) 600L Ultra-Low ESR NPO Capacitors





APPLICATIONS

- · Cellular Base Stations
- Broadband Wireless Services
- Satellite Communications
- **Devices**
- WiFi (802.11)
- · Public Safety Radio

· Subscriber-based Wireless

CIRCUIT APPLICATIONS

- Filter Networks
- High Q Frequency Sources
- Matching Networks
- · Tuning, Coupling, Bypass and DC Blocking

ELECTRICAL SPECIFICATIONS

Temperature Coefficient (TCC)	0 ± 30 PPM/°C			
Capacitance Range	0.1 pF to 27 pF			
Operating Temperature	-55°C to +125°C*			
Quality Factor	Greater than 2,000 at 1 MHz			
Insulation Resistance (IR)	10 ⁵ Megohms min. @ 25°C at rated WVDC 10 ⁴ Megohms min. @ 125°C at rated WVDC			
Working Voltage (WVDC)	200 V			
Dielectric Withstanding Voltage (DWV)	250% of rated WVDC for 5 seconds			
Aging Effects	None			
Piezoelectric Effects	None			

FEATURES

- · Lowest ESR in Class
- · Highest Working Voltage in Class 200 V
- · Capacitance Range 0.1 pF to 27 pF
- · High Q
- · High Self-Resonance

600 SERIES OVERVIEW

Series	Case Size	EIA Case Size		
600	L	0402		
600	S	0603		
600	F	0805		

PACKAGING OPTIONS





Tape & Reel

ENVIRONMENTAL CHARACTERISTICS

Themal Shock	5 Cycles, -55°C to 125°C		
Moisture Resistance	Mil-STD-202, Method 106		
Life Test	2000 hours at 125°C at 2X		
Solderability	Solder Coverage > 90% of end termination		
Terminal Strength	2 lbs. typ., 1 lb. min.		
Military Approval	DSCC Drawing Number 05003		

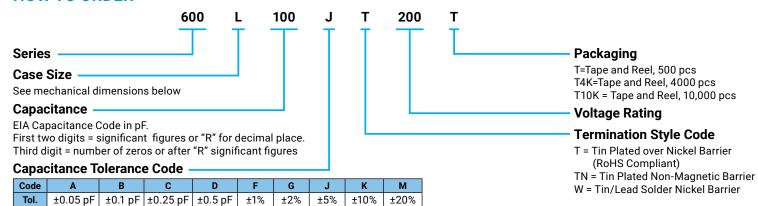
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CAPACITANCE VALUES

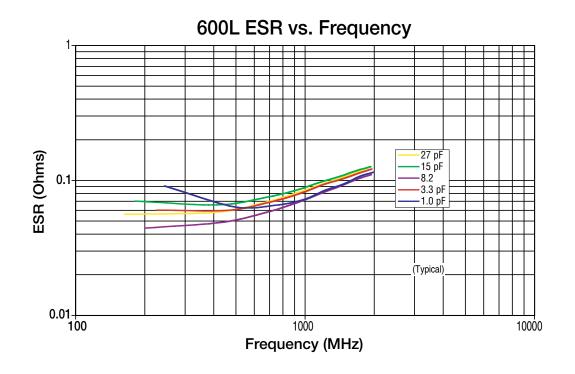
Value (pF)	Cap Code	Tolerances	Value (pF)	Cap Code	Tolerances	Value (pF)	Cap Code	Tolerances
0.1	0R1	A, B	1.6	1R6	A, B, C, D	6.2	6R2	A, B, C, D
0.2	0R2	A, B	1.8	1R8	A, B, C, D	6.8	6R8	B, C, J, K
0.3	0R3	A, B, C	2.0	2R0	A, B, C, D	7.5	7R5	B, C, J, K
0.4	0R4	A, B, C	2.2	2R2	A, B, C, D	8.2	8R2	B, C, J, K
0.5	0R5	A, B, C	2.4	2R4	A, B, C, D	9.1	9R1	B, C, J, K
0.6	0R6	A, B, C	2.7	2R7	A, B, C, D	10	100	F, G, J, K, M
0.7	0R7	A, B, C	3.0	3R0	A, B, C, D	11	110	F, G, J, K, M
0.8	0R8	A, B, C	3.3	3R3	A, B, C, D	12	120	F, G, J, K, M
0.9	0R9	A, B, C	3.6	3R6	A, B, C, D	15	150	F, G, J, K, M
1.0	1R0	A, B, C, D	3.9	3R9	A, B. C. D	18	180	F, G, J, K, M
1.1	1R1	A, B, C, D	4.3	4R3	A, B, C, D	20	200	F, G, J, K, M
1.2	1R2	A, B, C, D	4.7	4R7	A, B, C, D	22	220	F, G, J, K, M
1.3	1R3	A, B, C, D	5.1	5R1	A, B, C, D	24	240	F, G, J, K, M
1.5	1R5	A, B, C, D	5.6	5R6	A, B, C, D	27	270	F, G, J, K, M

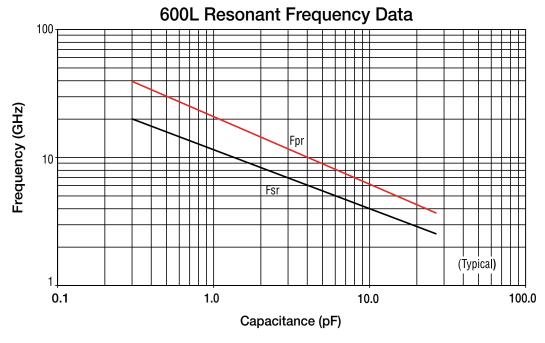
HOW TO ORDER



^{*}All Tape and Reel Packaging comes on 7" reels. The above part number refers to a 600L Series (case size L) 11 pF capacitor, J tolerance (±5%), 200 WVDC, with T termination (Tin Plated over Nickel Barrier, RoHS Compliant), Tape and Reel packaging.







ATC 600L Series Data Sheet Test Condition Description

Capacitors mounted in series microstrip configuration on 10-mil thick Rogers RO4350® softboard, 22-mils wide 1/2 oz. Cu traces.

FSR = lowest frequency at which S11 response, referenced at capacitor edge, crosses real axis on Smith Chart.

FPR = lowest frequency at which there is a notch in S21 magnitude response.