

## ATC HP 0402 Series High Performance NPO Ceramic MLCS

### Electrical Characteristics:

**Capacitance Range:** 0.2 pF to 30 pF @ 1 MHz

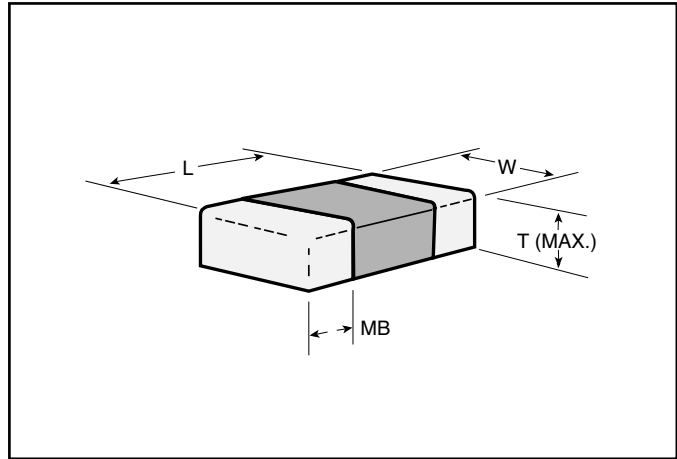
**Temperature Coefficient of Capacitance:**  $0 \pm 30$  ppm/°C (-55° to +125°C)

**Insulation Resistance (IR)**  $10^{12} \Omega$  min. @ 25°C and rated WVDC  
 $10^{11} \Omega$  min. @ 125°C and rated WVDC

**Dielectric Working Voltage (DWV):** 250% of rated WVDC

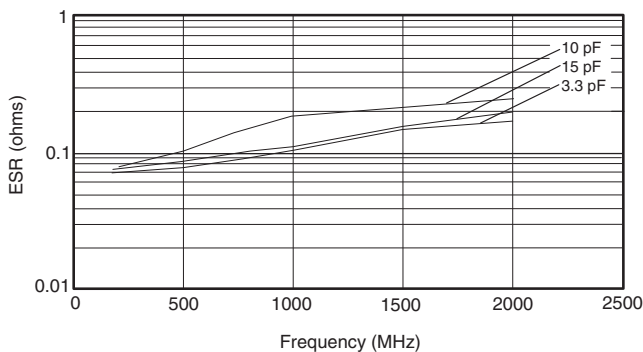
**Working Voltage (WVDC)** 50 WVDC

ATC offers the new HP Series high performance family of MLC ceramic capacitors. Built in a rugged ceramic SMT package, these products deliver high performance at the right price. The HP series is available in four popular EIA case sizes and is suitable for tuning, DC blocking, coupling and bypassing over the full range of wireless frequencies. All HP Series products are RoHS compliant.

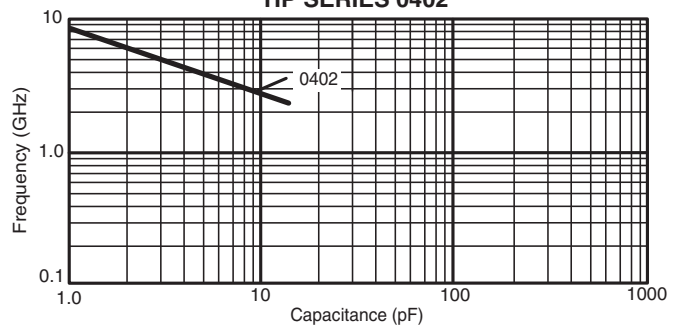


Case Size	0402
Length (L)	0.039 ±0.004 (1.00 ±0.1)
Width (W)	0.020 ±0.004 (0.50 ±0.1)
T Max.	0.024 (0.6)
Term. (MB) Max.	N/A

TYPICAL ESR vs. FREQUENCY  
HP SERIES 0402



TYPICAL SERIES RESONANT FREQUENCY  
HP SERIES 0402



A M E R I C A N T E C H N I C A L C E R A M I C S

ATC North America  
sales@atceramics.com

ATC Europe  
saleseur@atceramics.com

ATC Asia  
sales@atceramics-asia.com

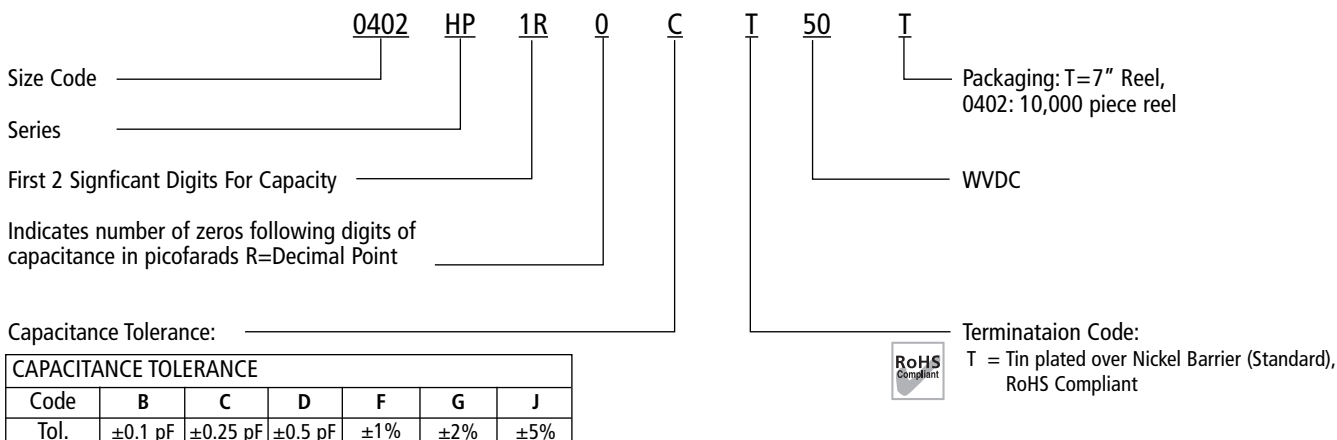
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# ATC HP 0402 SERIES HIGH PERFORMANCE NPO CERAMIC MLCS

## Capacitance Values:

CAP. CODE	CAP. (pF)	TOL.	RATED WVDC	CAP. CODE	CAP. (pF)	TOL.	RATED WVDC	CAP. CODE	CAP. (pF)	TOL.	RATED WVDC	CAP. CODE	CAP. (pF)	TOL.	RATED WVDC
0R2	0.2	B, C	50	1R4	1.4	B, C, D	50	3R3	3.3	B, C, D	50	100	10	F, G, J	50
0R3	0.3			1R5	1.5			3R6	3.6			110	11		
0R4	0.4			1R6	1.6			3R9	3.9			120	12		
0R5	0.5			1R7	1.7			4R3	4.3			130	13		
0R6	0.6			1R8	1.8			4R7	4.7			150	15		
0R7	0.7	B, C, D		1R9	1.9			5R1	5.1			180	18		
0R8	0.8			2R0	2.0			5R6	5.6			200	20		
0R9	0.9			2R1	2.1			6R2	6.2			220	22		
1R0	1.0			2R2	2.2			6R8	6.8			240	24		
1R1	1.1			2R4	2.4			7R5	7.5			270	27		
1R2	1.2			2R7	2.7			8R2	8.2			300	30		
1R3	1.3			3R0	3.0			9R1	9.1						

### Part Number Code



The above part number refers to an ATC HP 0402 Series 1.0 pF capacitor, C tolerance (±0.25 pF), 50 WVDC, with T termination (Tin Plated over Nickel Barrier), on 7 inch reel.

For additional information and catalogs contact your ATC representative or call direct at (+1-631) 622-4700. Consult factory for additional performance data.

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**A M E R I C A N T E C H N I C A L C E R A M I C S**

ATC North America  
sales@atceramics.com

ATC Europe  
saleseur@atceramics.com

ATC Asia  
sales@atceramics-asia.com

[www.atceramics.com](http://www.atceramics.com)