

# ATC 100 A Capacitance Values

CAP. CODE	CAP. (pF)	TOL.	RATED WVDC		CAP. CODE	CAP. (pF)	TOL.	RATED WVDC		CAP. CODE	CAP. (pF)	TOL.	RATED WVDC	
			STD.	EXT.				STD.	EXT.				STD.	EXT.
0R1	0.1	B	150	EXTENDED VOLTAGE	2R2	2.2	B, C, D	150	EXTENDED VOLTAGE	160	16	F, G, J, K, M	250	EXTENDED VOLTAGE
0R2	0.2				2R4	2.4				180	18			
0R3	0.3	B, C			2R7	2.7				200	20			
0R4	0.4				3R0	3.0				220	22			
0R5	0.5	B, C, D			3R3	3.3				240	24			
0R6	0.6				3R6	3.6				270	27			
0R7	0.7				3R9	3.9				300	30			
0R8	0.8				4R3	4.3				330	33			
0R9	0.9				4R7	4.7				360	36			
1R0	1.0				5R1	5.1				390	39			
1R1	1.1			5R6	5.6	430	43							
1R2	1.2			6R2	6.2	470	47							
1R3	1.3			6R8	6.8	510	51							
1R4	1.4			7R5	7.5	560	56							
1R5	1.5			8R2	8.2	620	62							
1R6	1.6			9R1	9.1	680	68							
1R7	1.7			100	10	750	75							
1R8	1.8			110	11	820	82							
1R9	1.9			120	12	910	91							
2R0	2.0			130	13	101	100							
2R1	2.1			150	15									

VRMS = 0.707 X WVDC

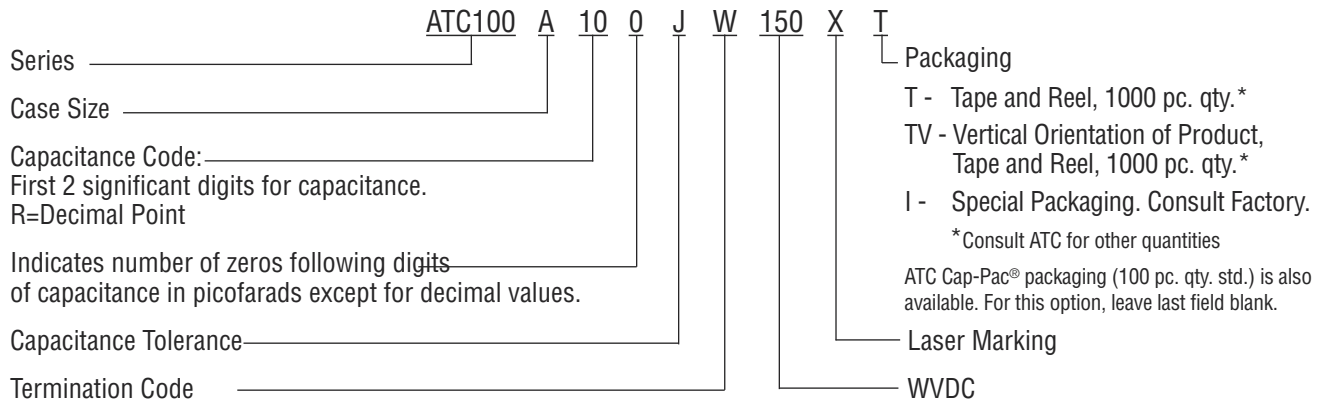
SPECIAL VALUES, TOLERANCES, HIGHER WVDC AND MATCHING AVAILABLE. PLEASE CONSULT FACTORY.

NOTE: EXTENDED WVDC DOES NOT APPLY TO CDR PRODUCTS.

## CAPACITANCE TOLERANCE

Code	B	C	D	F	G	J	K	M
Tol.	±0.1 pF	±0.25 pF	±0.5 pF	±1%	±2%	±5%	±10%	±20%

## ATC PART NUMBER CODE



The above part number refers to a 100 A Series (case size A) 10 pF capacitor, J tolerance (±5%), 150 WVDC, with W termination (Tin/Lead, Solder Plated over Nickel Barrier), laser marking and ATC Tape and Reel packaging.

ATC accepts orders for our parts using designations **with** or **without** the "ATC" prefix. Both methods of defining the part number are equivalent, i.e., part numbers referenced with the "ATC" prefix are interchangeable to parts referenced without the "ATC" prefix. Customers are free to use either in specifying or procuring parts from American Technical Ceramics.

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

Consult factory for additional performance data.


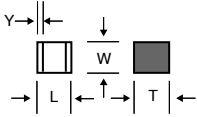

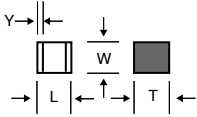

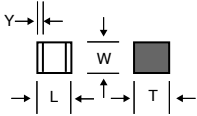

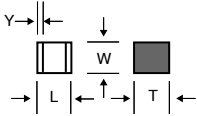
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# ATC 100 A Capacitors: Mechanical Configurations

ATC SERIES & CASE SIZE	ATC TERM. CODE	MIL-PRF-55681	CASE SIZE & TYPE	OUTLINES  W/T IS A TERMINATION SURFACE	BODY DIMENSIONS INCHES (mm)			LEAD AND TERMINATION DIMENSIONS AND MATERIALS	
					LENGTH (L)	WIDTH (W)	THICKNESS (T)	OVERLAP (Y)	MATERIALS
100A	W	CDR12BG	A  Solder Plate		.055 +.015 -.010 (1.40 +0.38 -0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 +.010 -.005 (0.25 +0.25 -0.13)	Tin/Lead, Solder Plated over Nickel Barrier Termination
100A	P	CDR12BG	A  Pellet		.055 +.025 -.010 (1.40 +0.64 -0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 +.010 -.005 (0.25 +0.25 -0.13)	Heavy Tin/Lead Coated, over Nickel Barrier Termination
100A	T	N/A	A  Solderable Nickel Barrier		.055 +.015 -.010 (1.40 +0.38 -0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 +.010 -.005 (0.25 +0.25 -0.13)	<b>RoHS Compliant</b> Tin Plated over Nickel Barrier Termination
100A	CA	CDR11BG	A  Gold Chip		.055 +.015 -.010 (1.40 +0.38 -0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 +.010 -.005 (0.25 +0.25 -0.13)	<b>RoHS Compliant</b> Gold Plated over Nickel Barrier Termination

For a complete military catalog, request American Technical Ceramics document ATC 001-818.


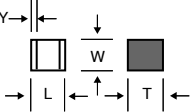

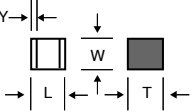

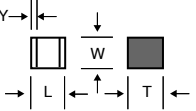
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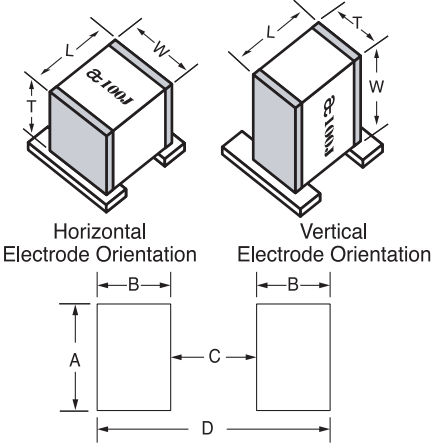
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# ATC 100 A Non-Magnetic Capacitors: Mechanical Configurations

ATC SERIES & CASE SIZE	ATC TERM. CODE	MIL-PRF-55681	CASE SIZE & TYPE	OUTLINES W/T IS A TERMINATION SURFACE	BODY DIMENSIONS INCHES (mm)			LEAD AND TERMINATION DIMENSIONS AND MATERIALS	
					LENGTH (L)	WIDTH (W)	THICKNESS (T)	OVERLAP (Y)	MATERIALS
100A	WN	Meets Requirements	A  Non-Mag Solder Plate		.055 +.025 -.010 (1.40 +.64 -.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 +.010 -.005 (0.25 +.025 -.013)	Tin/Lead, Solder Plated over Non-Magnetic Barrier Termination
100A	PN	Meets Requirements	A  Non-Mag Pellet		.055 +.035 -.010 (1.40 +.89 -.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 +.010 -.005 (0.25 +.025 -.013)	Heavy Tin/Lead Coated, over Non-Magnetic Barrier Termination
100A	TN	Meets Requirements	A  Non-Mag Solderable Barrier		.055 +.025 -.010 (1.40 +.64 -.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	.010 +.010 -.005 (0.25 +.025 -.013)	<b>RoHS Compliant</b> Tin Plated over Non-Magnetic Barrier Termination

All 100 A Capacitors are available laser marked with ATC's identification, capacitance code and tolerance.

## Suggested Mounting Pad Dimensions



Horizontal Electrode Orientation

Vertical Electrode Orientation

Case A

	Pad Size	A Min.	B Min.	C Min.	D Min.
Vertical Mount	Normal	.070	.050	.030	.130
	High Density	.050	.030	.030	.090
Horizontal Mount	Normal	.080	.050	.030	.130
	High Density	.060	.030	.030	.090

Dimensions are in inches.

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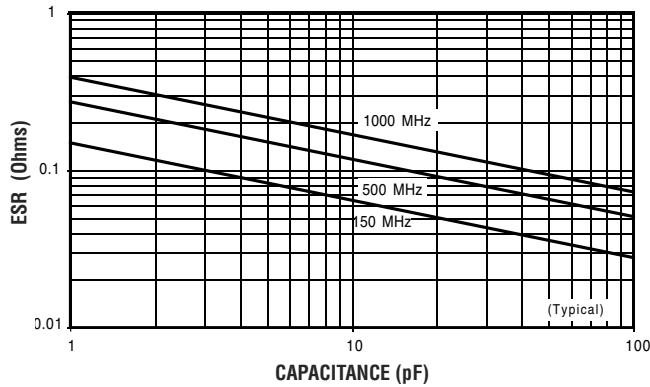
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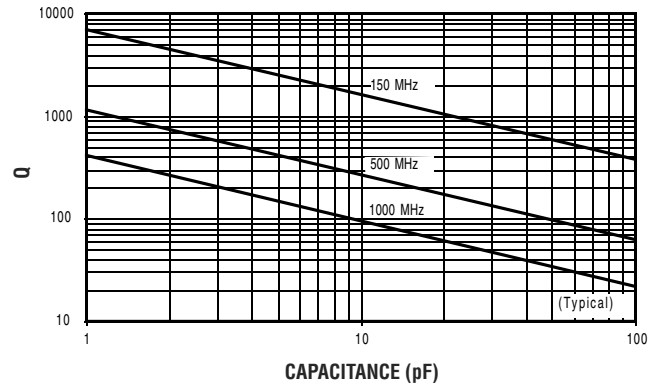
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# ATC 100 A Performance Data

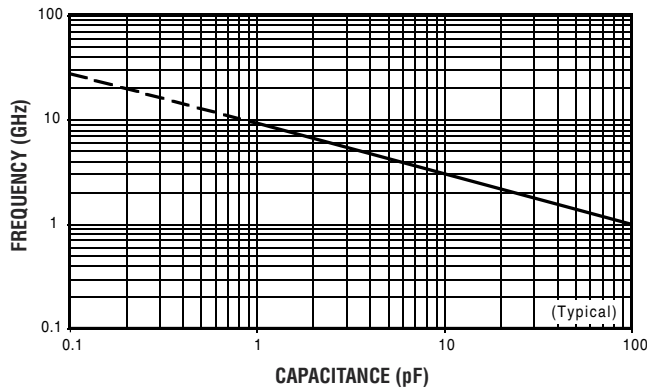
**ESR VS. CAPACITANCE**  
**ATC SERIES 100, CASE A**



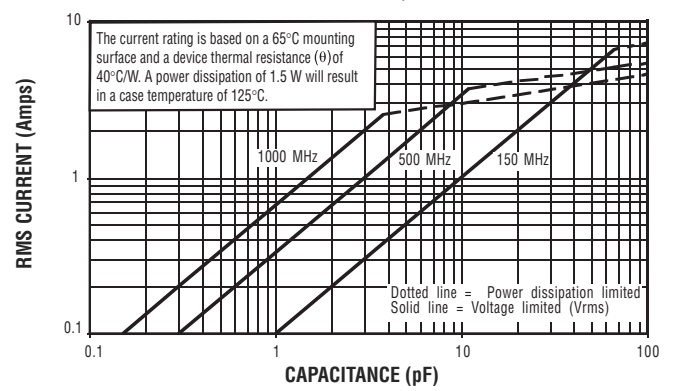
**Q VS. CAPACITANCE**  
**ATC SERIES 100, CASE A**



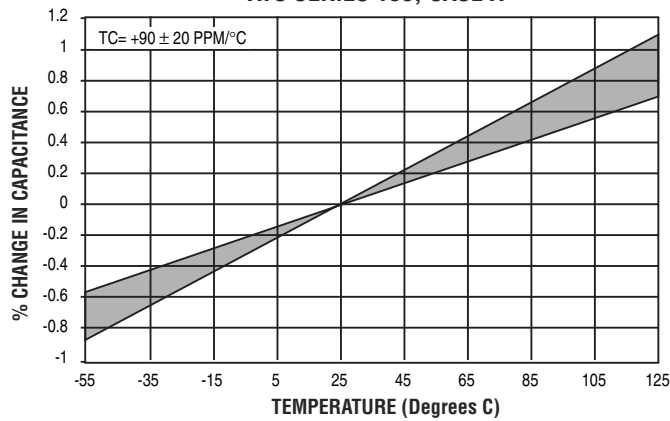
**SERIES RESONANCE VS. CAPACITANCE**  
**ATC SERIES 100, CASE A**



**CURRENT RATING VS. CAPACITANCE**  
**ATC SERIES 100, CASE A**



**CAPACITANCE CHANGE VS. TEMPERATURE**  
**ATC SERIES 100, CASE A**



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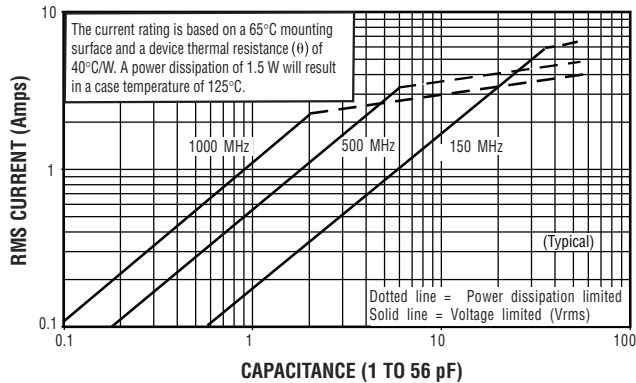
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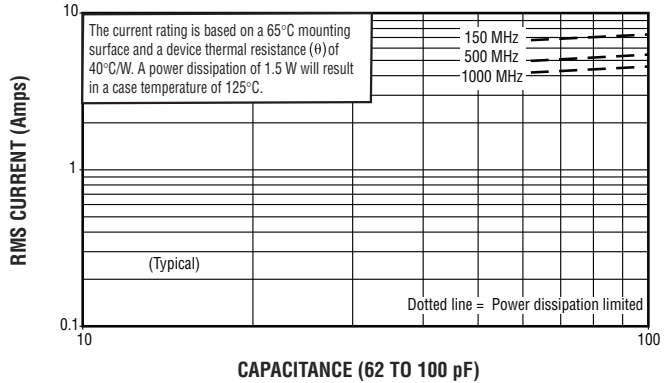
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# ATC 100 A Performance Data

**CURRENT RATING VS. CAPACITANCE**  
**ATC SERIES 100, CASE A, EXTENDED VOLTAGE**



**CURRENT RATING VS. CAPACITANCE**  
**ATC SERIES 100, CASE A, EXTENDED VOLTAGE**



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