

ATC 700 A 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	
			STD.	EXT.				STD.	EXT.				STD.	EXT.				STD.	EXT.
0R1	0.1	B	150	250	2R4	2.4	B, C, D	150	250	200	20	F, G, J, K, M	150	250	151	150	F, G, J, K, M	150	N/A
0R2	0.2	B, C			2R7	2.7				220	22				161	160			
0R3	0.3				3R0	3.0				240	24				181	180			
0R4	0.4	3R3			3.3	270				27	201				200				
0R5	0.5	B, C, D			3R6	3.6				300	30				221	220			
0R6	0.6				3R9	3.9				330	33				241	240			
0R7	0.7				4R3	4.3				360	36				271	270			
0R8	0.8				4R7	4.7				390	39				301	300			
0R9	0.9				5R1	5.1				430	43				331	330			
1R0	1.0				5R6	5.6				470	47				361	360			
1R1	1.1		6R2	6.2	510	51	391	390											
1R2	1.2		6R8	6.8	560	56	431	430											
1R3	1.3		7R5	7.5	620	62	471	470											
1R4	1.4		8R2	8.2	680	68	511	510											
1R5	1.5	9R1	9.1	750	75	561	560												
1R6	1.6	100	10	820	82	621	620												
1R7	1.7	110	11	910	91	681	680												
1R8	1.8	120	12	101	100	751	750												
1R9	1.9	130	13	111	110	821	820												
2R0	2.0	150	15	121	120	911	910												
2R1	2.1	160	16	131	130	102	1000												
2R2	2.2	180	18																

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 values in **bold** type indicate porcelain dielectric. All other capacitance values indicate ceramic dielectric.

All 700 A Capacitors are available laser marked with ATC's identification, capacitance code and tolerance.

ATC PART NUMBER CODE

ATC700 A 6R 8 J W 150 X T

Series _____

Case Size _____

Capacitance Code: _____
First 2 significant digits for capacitance.
R=Decimal Point

Indicates number of zeros following digits
of capacitance in picofarads except for decimal values.

Capacitance Tolerance _____

Packaging

T - Tape and Reel, 1000 pc. qty.*

TV - Vertical Orientation of Product,
Tape and Reel, 1000 pc. qty.*

I - Special Packaging. Consult Factory.
*Consult ATC for other quantities

ATC Cap-Pac® packaging (100 pc. qty. std.) is also
available. For this option, leave last field blank.

Laser Marking

WVDC

Termination Code

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%

The above part number refers to a 700 A Series (case size A) 6.8 pF capacitor,
J tolerance (±5%), 150 WVDC, with W termination (Tin/Lead, Solder Plated over Nickel Barrier), laser marking and ATC Cap-Pac® 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.


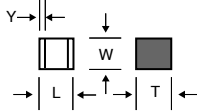

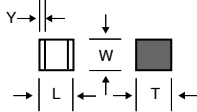

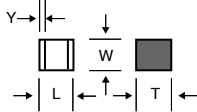

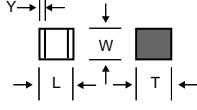
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ATC 700 A Capacitors: Mechanical Configurations

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
700A	W	CDR12BP	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 -.013)	Tin/Lead, Solder Plated over Nickel Barrier Termination
700A	P	CDR12BP	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 -.013)	Heavy Tin/Lead Coated, over Nickel Barrier Termination
700A	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 -.013)	RoHS Compliant Tin Plated over Nickel Barrier Termination
700A	CA	CDR11BP	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 -.013)	RoHS Compliant Gold Plated over Nickel Barrier Termination

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

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ATC 700 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
700A	WN	Meets Requirements	A Non-Mag Solder Plate		.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)	Tin/Lead, Solder Plated over Non-Magnetic Barrier Termination
700A	PN	Meets Requirements	A Non-Mag Pellet		.055 +.035 -.010 (1.40 +0.89 -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 Non-Magnetic Barrier Termination
700A	TN	Meets Requirements	A Non-Mag Solderable Barrier		.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)	RoHS Compliant Tin Plated over Non-Magnetic Barrier Termination

*Capacitors with values greater than 100 pF contain a trace magnetic element that may exhibit weak magnetic properties.

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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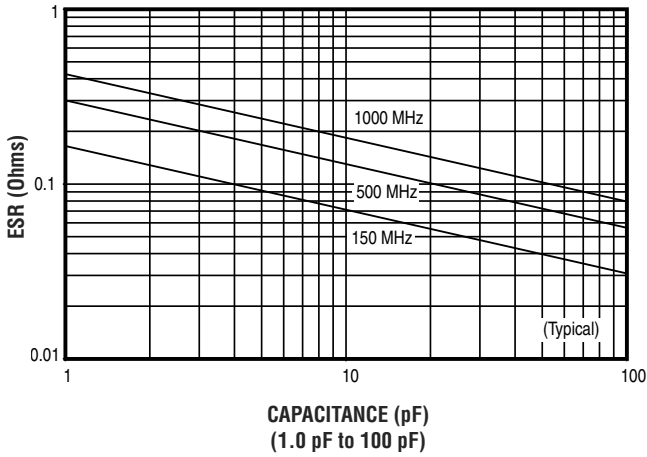
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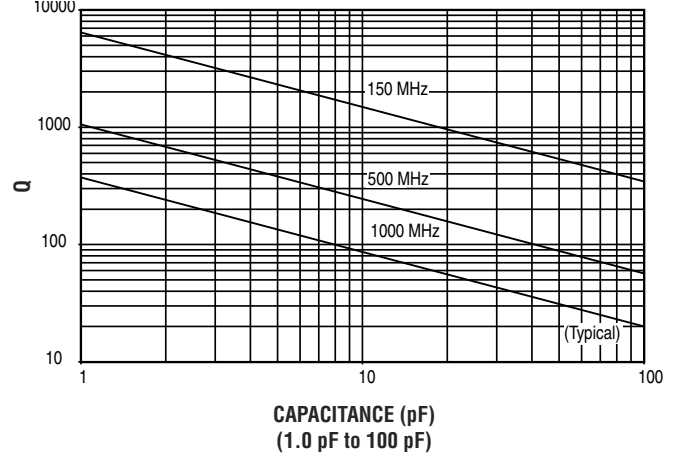
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ATC 700 A Performance Data

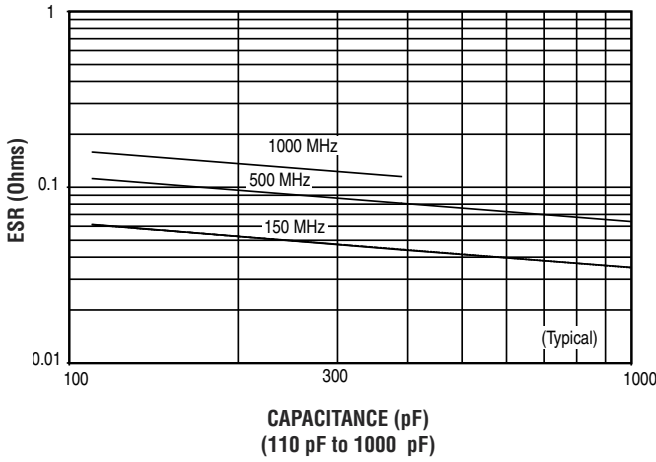
**ESR VS. CAPACITANCE
ATC SERIES 700, CASE A**



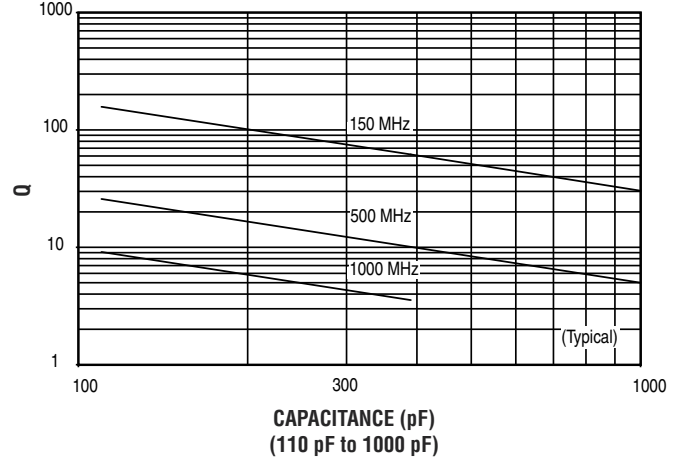
**Q VS. CAPACITANCE
ATC SERIES 700, CASE A**



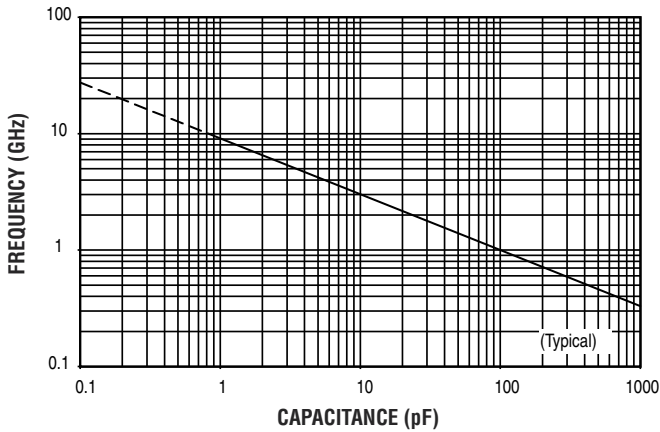
**ESR VS. CAPACITANCE
ATC SERIES 700, CASE A**



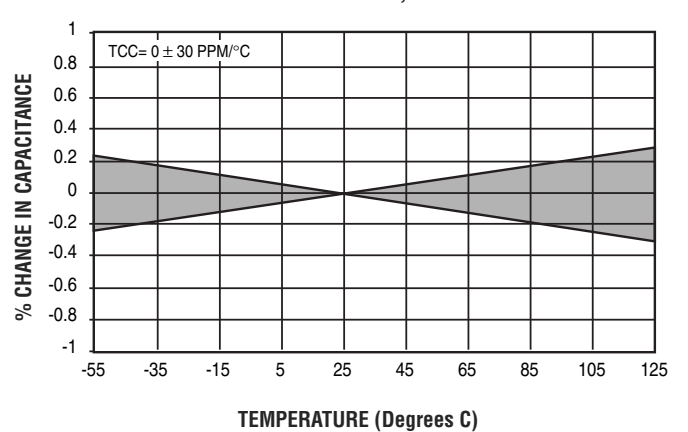
**Q VS. CAPACITANCE
ATC SERIES 700, CASE A**



**SERIES RESONANCE VS. CAPACITANCE
ATC SERIES 700, CASE A**



**CAPACITANCE CHANGE VS. TEMPERATURE
ATC SERIES 700, CASE A**



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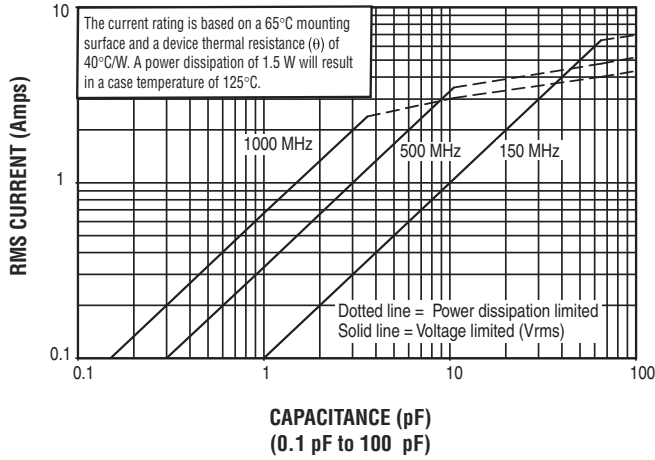
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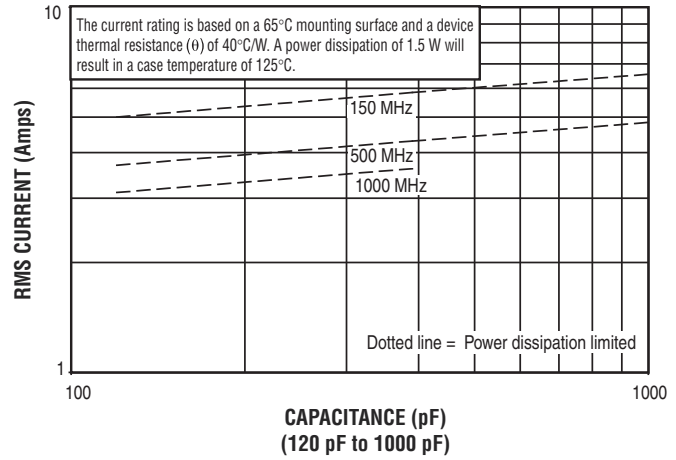
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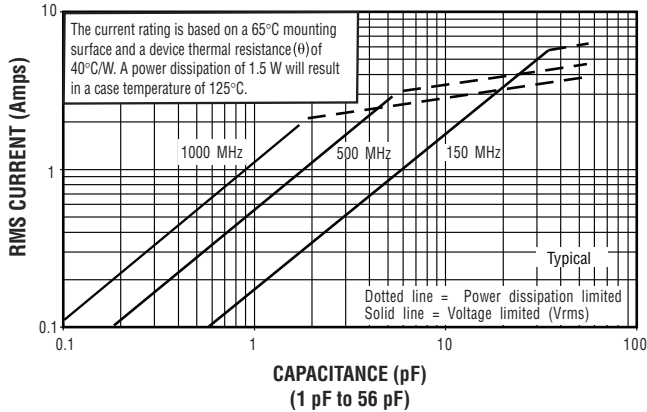
**CURRENT RATING VS. CAPACITANCE
ATC SERIES 700, CASE A**



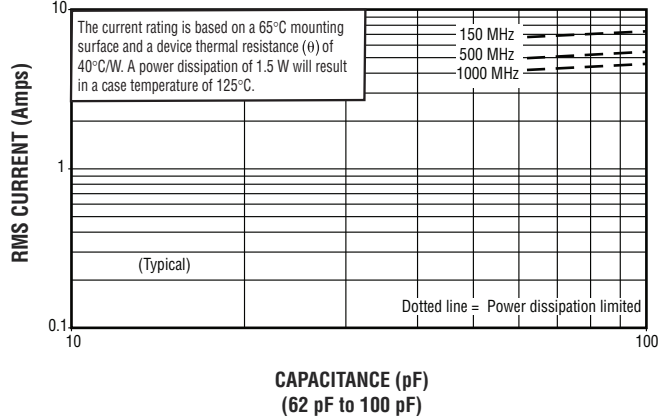
**CURRENT RATING VS. CAPACITANCE
ATC SERIES 700, CASE A**



**CURRENT RATING VS. CAPACITANCE
ATC SERIES 700, CASE A, EXTENDED VOLTAGE**



**CURRENT RATING VS. CAPACITANCE
ATC SERIES 700, CASE A, EXTENDED VOLTAGE**



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