

ATC 100 E 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.
1R0	1.0				5R6	5.6				470	47				391	390		3600	
1R1	1.1				6R2	6.2				510	51				431	430			
1R2	1.2				6R8	6.8	B, C			560	56				471	470			
1R3	1.3				7R5	7.5	D			620	62				511	510			
1R4	1.4				8R2	8.2				680	68				561	560		2500	
1R5	1.5				9R1	9.1				750	75				621	620			
1R6	1.6				100	10				820	82				681	680			
1R7	1.7				110	11				910	91				751	750			
1R8	1.8				120	12				101	100				821	820	F, G, J, K, M		
1R9	1.9				130	13				111	110				911	910			
2R0	2.0	B, C	3600	7200	150	15		3600	7200	121	120	F, G, J, K, M	3600		102	1000			
2R1	2.1	D			160	16				131	130				112	1100			
2R2	2.2				180	18				151	150				122	1200		1000	
2R4	2.4				200	20	F, G, J, K, M			161	160				152	1500			
2R7	2.7				220	22				181	180				182	1800			
3R0	3.0				240	24				201	200				222	2200			
3R3	3.3				270	27				221	220				272	2700			
3R6	3.6				300	30				241	240				302	3000			
3R9	3.9				330	33				271	270				332	3300	G, J, K, M		
4R3	4.3				360	36				301	300				392	3900		500	
4R7	4.7				390	39				331	330				472	4700			
5R1	5.1				430	43				361	360				512	5100			

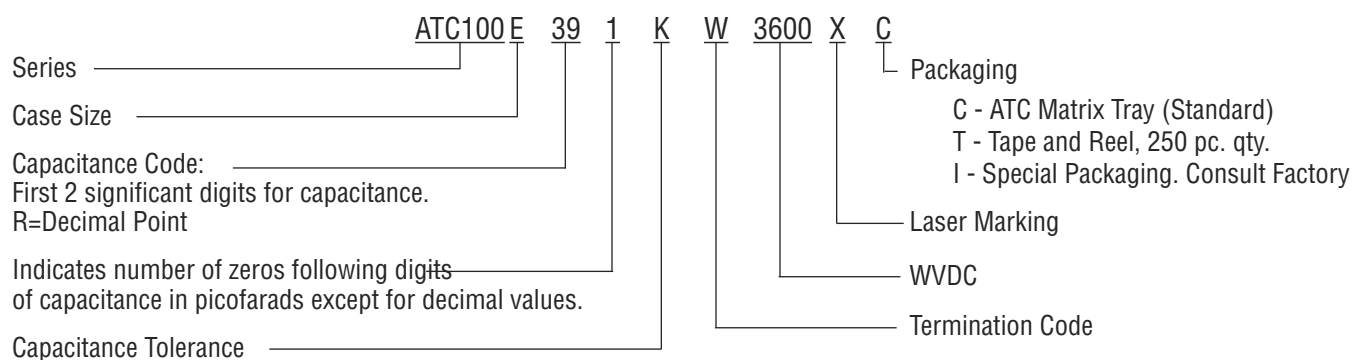
VRMS = 0.707 X WVDC

• SPECIAL VALUES, TOLERANCES, MATCHING, AND CAPACITOR ASSEMBLIES ARE AVAILABLE. • ATC'S CUSTOM POWER CAPACITOR ASSEMBLY CATALOG, ATC # 001-900 LISTS ASSEMBLY OPTIONS. • EXTENDED WORKING VOLTAGES ARE AVAILABLE FOR COMMERCIAL ORDERS ONLY. • ENCAPSULATION OPTION AVAILABLE. PLEASE CONSULT FACTORY.

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 E Series (case size E) 390 pF capacitor, K tolerance (±10%), 3600 WVDC, with W termination (Tin/Lead, Solder Plated over Nickel Barrier), laser marking and Waffle-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.

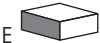
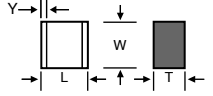
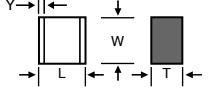
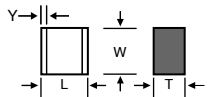
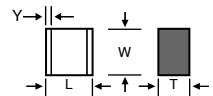
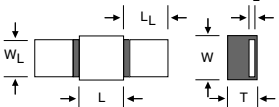
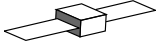
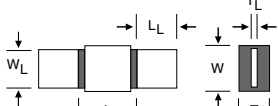
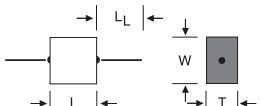
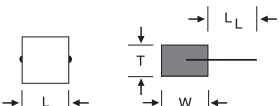
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ATC 100 E Capacitors: Mechanical Configurations

ATC SERIES & CASE SIZE	ATC TERM. CODE	CASE SIZE & TYPECASE 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
100E	W	 E Solder Plate		.380 +.015 -.010 (9.65 +0.38 -0.25)			.040 (1.02) max.	Tin/Lead, Solder Plated over Nickel Barrier Termination
100E	P	 E Pellet		.380 +.040 -.010 (9.65 +1.02 -0.25)				Heavy Tin/Lead Coated, over Nickel Barrier Termination
100E	T	 E Solderable Nickel Barrier		.380 +.015 -.010 (9.65 +0.38 -0.25)				RoHS Compliant Tin Plated over Nickel Barrier Termination
100E	CA	 E Gold Chip		.380 +.015 -.010 (9.65 +0.38 -0.25)				RoHS Compliant Gold Plated over Nickel Barrier Termination
100E	MS	 E Microstrip		.380 +.035 -.010 (9.65 +0.89 -0.25)			N/A	High Purity Silver Leads $L_L = .750 (19.05) \text{ min.}$ $W_L = .350 \pm .010 (8.89 \pm 0.25)$ $T_L = .010 \pm .005 (0.25 \pm 0.13)$ Leads are Attached with High Temperature Solder.
100E	AR	 E Axial Ribbon						
100E	AW	 E Axial Wire						Silver-plated Copper Leads Dia. = .032 ±.002 (.813 ±.051) $L_L = 2.25 (57.2) \text{ min.}$
100E	RW	 E Radial Wire						Silver-plated Copper Leads Dia. = .032 ±.002 (.813 ±.051) $L_L = 1.0 (25.4) \text{ min.}$

Custom lead styles and lengths are available; consult factory. All leads are high purity silver attached with high temperature solder and are **RoHS** compliant.

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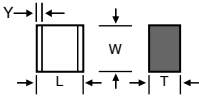
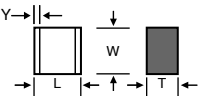
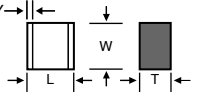
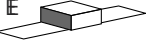
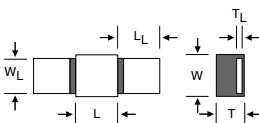
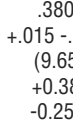
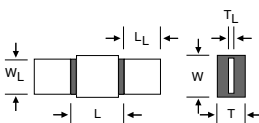
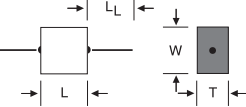
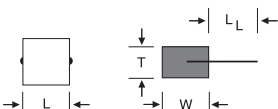
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ATC 100 E Capacitors: Non-Magnetic Mechanical Configurations

ATC SERIES & CASE SIZE	ATC TERM. CODE	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		
100E	WN	E  Non-Mag Solder Plate		.380 +.015 -.010 (9.65 +0.38 -0.25)		.170 (4.32) max.	.040 (1.02) max.	Tin/Lead, Solder Plated over Non-Magnetic Barrier Termination		
100E	PN	E  Non-Mag Pellet		.380 +.040 -.010 (9.65 +1.02 -0.25)				Heavy Tin/Lead Coated, over Non-Magnetic Barrier Termination		
100E	TN	E  Non-Mag Solderable Barrier		.380 +.015 -.010 (9.65 +0.38 -0.25)				RoHS Compliant Tin Plated over Non-Magnetic Barrier Termination		
100E	MN	E  Non-Mag Microstrip					.380 +.015 -.010 (9.65 +0.38 -0.25)	.170 (4.32) max.	N/A	High Purity Silver Leads L _L = .750 (19.05) min. W _L = .350 ±.010 (8.89 ±0.25) T _L = .010 ±.005 (0.25 ±0.13) Leads are Attached with High Temperature Solder.
100E	AN	 Non-Mag Axial Ribbon								
100E	BN	E  Non-Mag Axial Wire								
100E	RN	E  Non-Mag Radial Wire								

Custom lead styles and lengths are available; consult factory. All leads are high purity silver attached with high temperature solder and are **RoHS** compliant.

Suggested Mounting Pad Dimensions

Horizontal
Electrode Orientation

Vertical
Electrode Orientation

Case E

	Pad Size	A Min.	B Min.	C Min.	D Min.
Vertical Mount	Normal	.185	.050	.325	.425
	High Density	.165	.030	.325	.385
Horizontal Mount	Normal	.405	.050	.325	.425
	High Density	.385	.030	.325	.385

Dimensions are in inches.

AMERICAN TECHNICAL CERAMICS

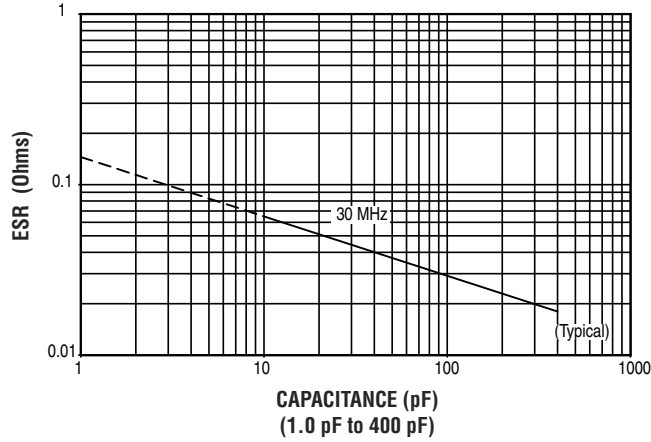
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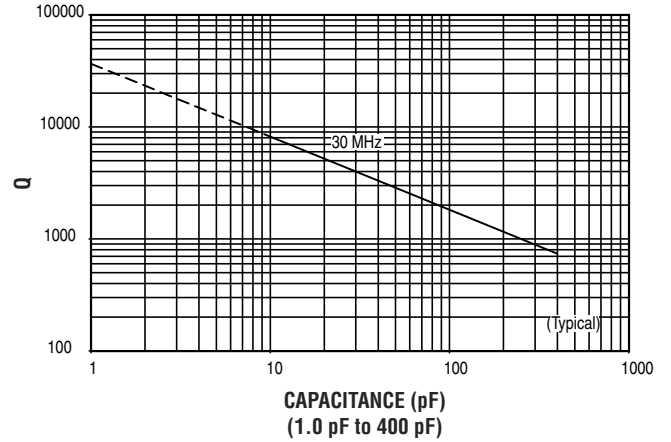
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ATC 100 E Performance Data

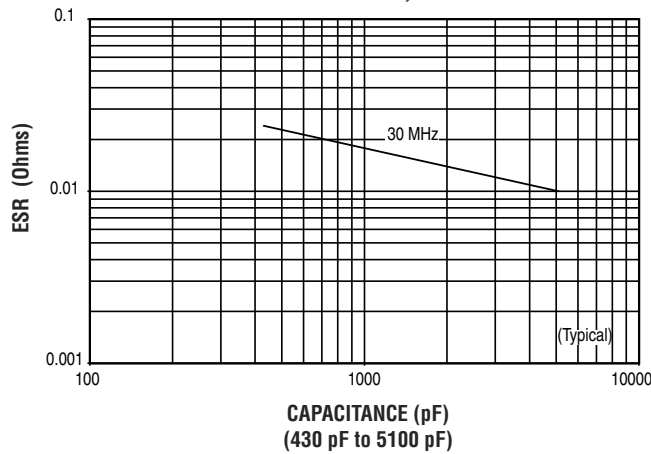
ESR VS. CAPACITANCE
ATC SERIES 100, CASE E



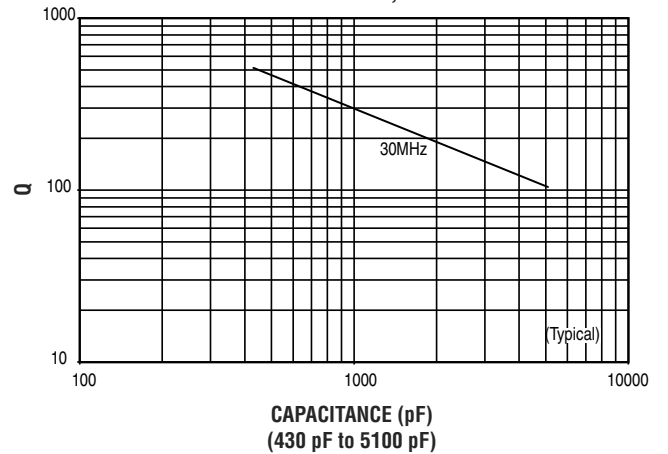
Q VS. CAPACITANCE
ATC SERIES 100, CASE E



ESR VS. CAPACITANCE
ATC SERIES 100, CASE E



Q VS. CAPACITANCE
ATC SERIES 100, CASE E



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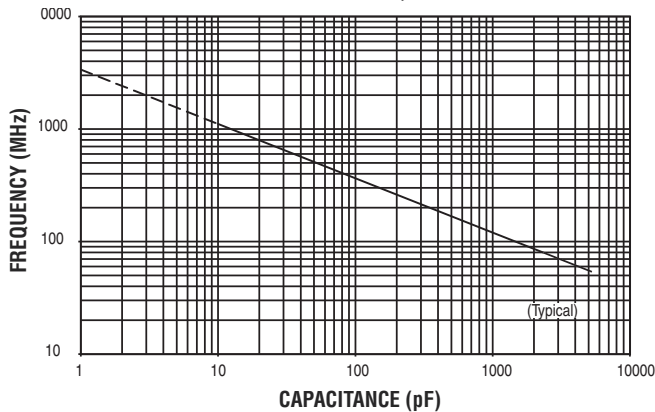
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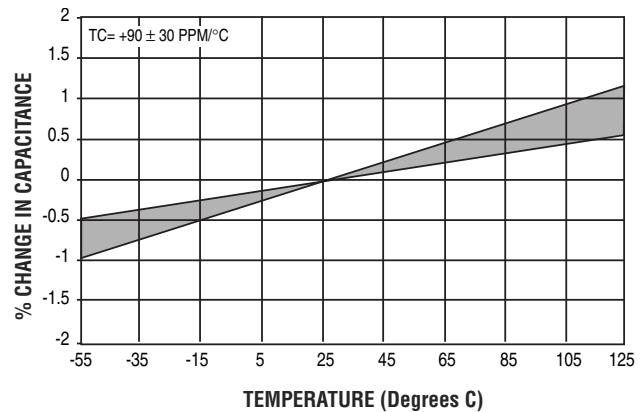
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ATC 100 E Performance Data

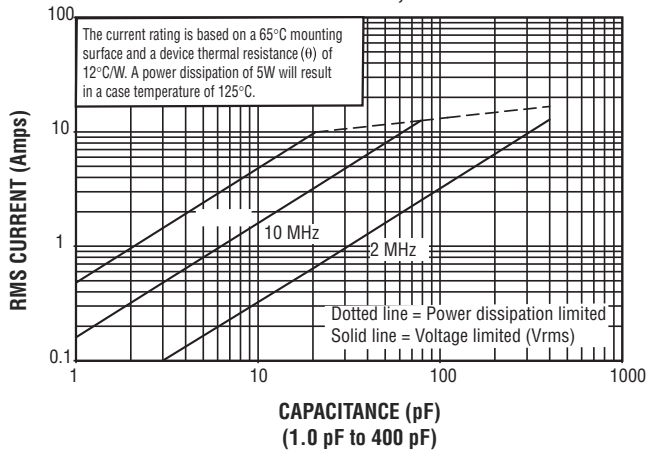
SERIES RESONANCE VS. CAPACITANCE
ATC SERIES 100, CASE E



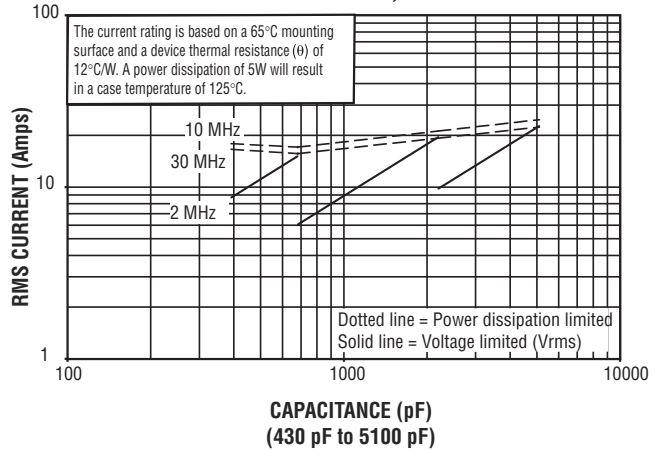
CAPACITANCE CHANGE VS. TEMPERATURE
ATC SERIES 100, CASE E



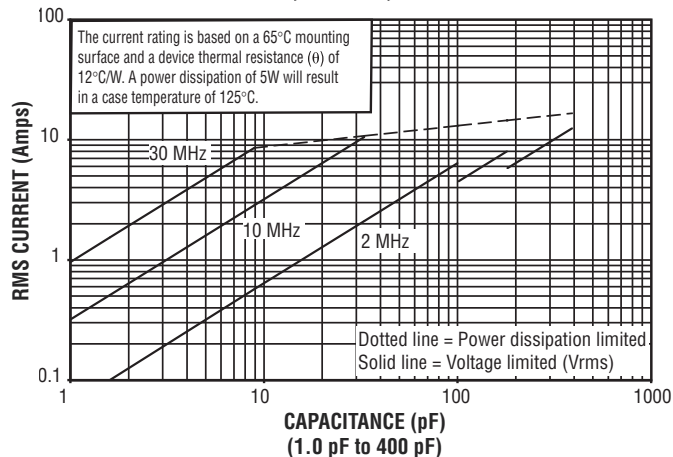
CURRENT RATING VS. CAPACITANCE
ATC SERIES 100, CASE E



CURRENT RATING VS. CAPACITANCE
ATC SERIES 100, CASE E



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



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