

ATC 200 A Series BX Ceramic Multilayer Capacitors

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ATC, the industry leader, offers new improved ESR/ESL performance for the 200 A Series Capacitors. This Series exhibits high volumetric efficiency with superior IR characteristics. Ceramic construction provides a rugged, hermetic package.

Typical functional applications: Bypass, Coupling and DC Blocking.

Typical circuit applications: Switching Power Supplies and High Power Broadband Coupling.

ENVIRONMENTAL TESTS

ATC 200 A Series Capacitors are designed and manufactured to meet and exceed the requirements of EIA-198, MIL-PRF-55681 and MIL-PRF-123.

! " MIL-STD-202, Method 107, Condition A.

"#\$! ! " "# MIL-STD-202, Method 106.

& % # \$ #' MIL-STD-202, Method 103, Condition A, with 1.5 Volts DC applied while subjected to an environment of 85°C with 85% relative humidity for 240 hours min.

"# MIL-STD-202, Method 108, for 2000 hours, at 125°C. 200% WVDC applied.



ELECTRICAL AND MECHANICAL SPECIFICATIONS

" " # # ! 2.5% max. @ 1 KHz
! # \$! # # # ±15% maximum (-55°C to +125°C)

" \$ # ! " "# !
510 pF to 0.01 MFd:
10⁴ Megohms min. @ +25°C at rated WVDC.
10³ Megohms min. @ +125°C at rated WVDC.

& ! % # & %
See Capacitance Values Table, page 2.

#! & # "# % # & %
Case A: 250% of rated WVDC for 5 secs. (125 VDC)

" 3% maximum per decade hour.
(# ! # " Negligible

#! " ! # 2% typical
! # # ! # \$! !
From -55°C to +125°C (No derating of working voltage).

! # "#' " Available in various surface mount styles. See Mechanical Configurations, page 3.

! "#! # Terminations for chips and pellets withstand a pull of 5 lbs. min., 10 lbs. typical, for 5 seconds in direction perpendicular to the termination surface of the capacitor. Test per MIL-STD-202, method 211.



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

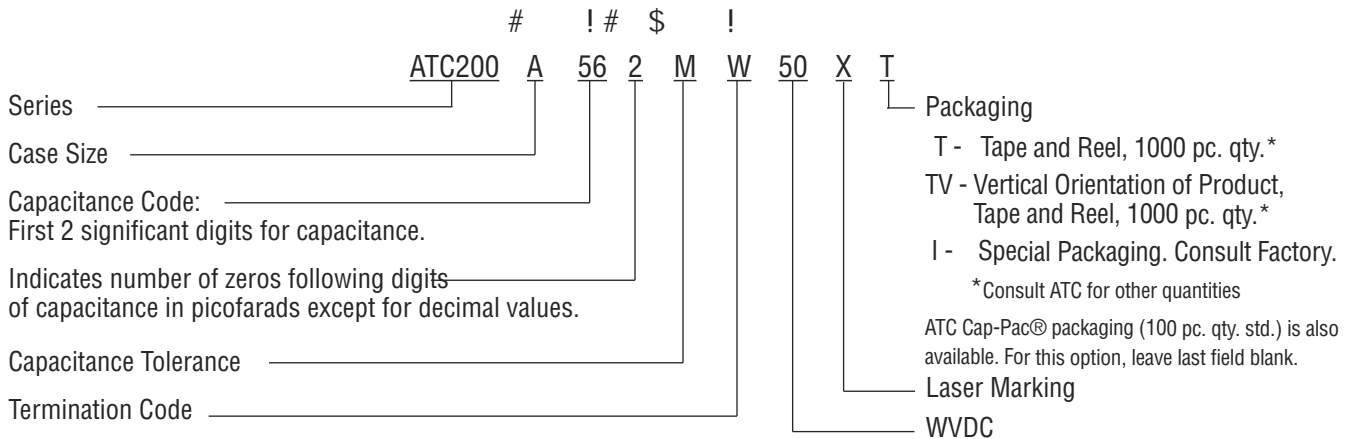
ATC 200 A Capacitance Values

	5	#	! # &%		5	#	! # &%
511	510			202	2000		
561	560			222	2200		
621	620			272	2700		
681	680			332	3300		
751	750			392	3900		
821	820	K, M, N	50	472	4700	K, M, N	50
911	910			502	5000		
102	1000			562	5600		
122	1200			682	6800		
152	1500			822	8200		
182	1800			103	10,000		

" % \$ " # ! " ! &% # % " "\$ # # !'

!

Code	K	M	N
Tol.	±10%	±20%	±30%



The above part number refers to a 200 A Series (case size A) 5600 pF capacitor, M tolerance (±20%), 50 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.

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

ATC 200 A Capacitors: Mechanical Configurations

Part #	Code	Material	Diagram	Dimensions (mm)			Termination	
				Thickness	Width	Length		
200A	W	A Solder Plate		.055 +.015 -.010 (1.40) +0.38 -.025)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	0.010 +.010 - .005 (0.25 +0.25 - 0.13)	Tin/Lead, Solder Plated over Nickel Barrier Termination
200A	P	A Pellet		.055 +.025 -.010 (1.40) +0.64 -.025)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	0.010 +.010 - .005 (0.25 +0.25 - 0.13)	Heavy Tin/Lead Coated, over Nickel Barrier Termination
200A	T	A Solderable Nickel Barrier		.055 +.015 -.010 (1.40) +0.38 -.025)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	0.010 +.010 - .005 (0.25 +0.25 - 0.13)	RoHS Compliant Tin Plated over Nickel Barrier Termination
200A	CA	A Gold Chip		.055 +.015 -.010 (1.40) +0.38 -.025)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	0.010 +.010 - .005 (0.25 +0.25 - 0.13)	RoHS Compliant Gold Plated over Nickel Barrier Termination

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
sales@atceramics.com

ATC Asia
sales@atceramics-asia.com

ATC 200 A Capacitors: Non-Magnetic Mechanical Configurations

Part #	Code	Description	Diagram	Dimensions (inches)			Termination	
				Height	Width	Length		
200A	WN	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
200A	PN	A Non-Mag Pellet		.055 +.035 -.010 (1.40 +0.89 -0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	0.010 +.010 - .005 (0.25 +0.25 - 0.13)	Heavy Tin/Lead Coated, over Non-Magnetic Barrier Termination
200A	TN	A Non-Mag Solderable Barrier		.055 +.025 -.010 (1.40 +0.64 -0.25)	.055 ±.015 (1.40 ±0.38)	.057 (1.45) max.	0.010 +.010 - .005 (0.25 +0.25 - 0.13)	RoHS Compliant Tin Plated over Non-Magnetic Barrier Termination

Suggested Mounting Pad Dimensions

Horizontal Electrode Orientation

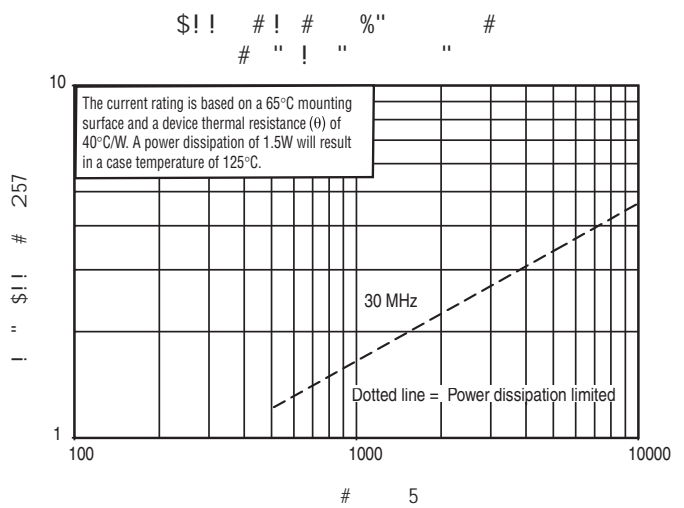
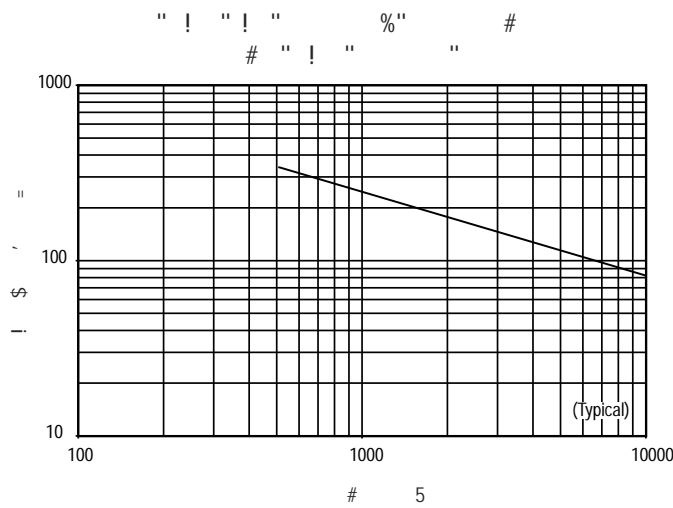
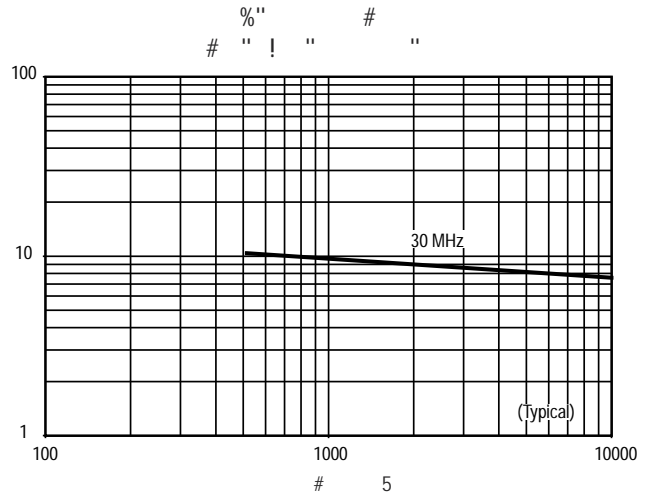
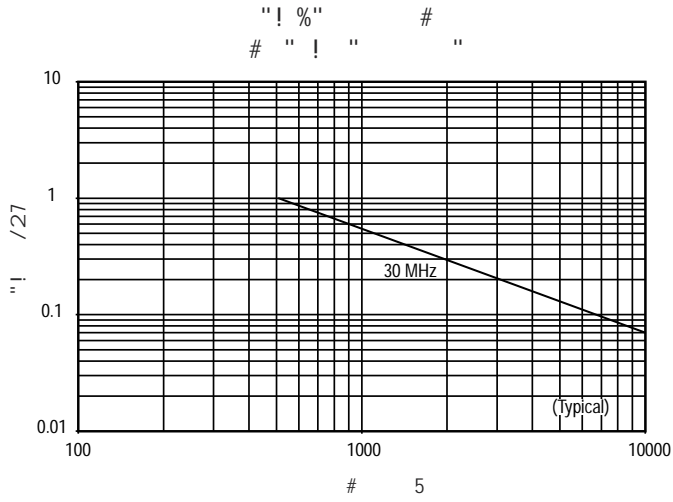
Vertical Electrode Orientation

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.

ATC 200 A Performance Data



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ATC Asia
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