

# ATC 800 A Capacitance Values

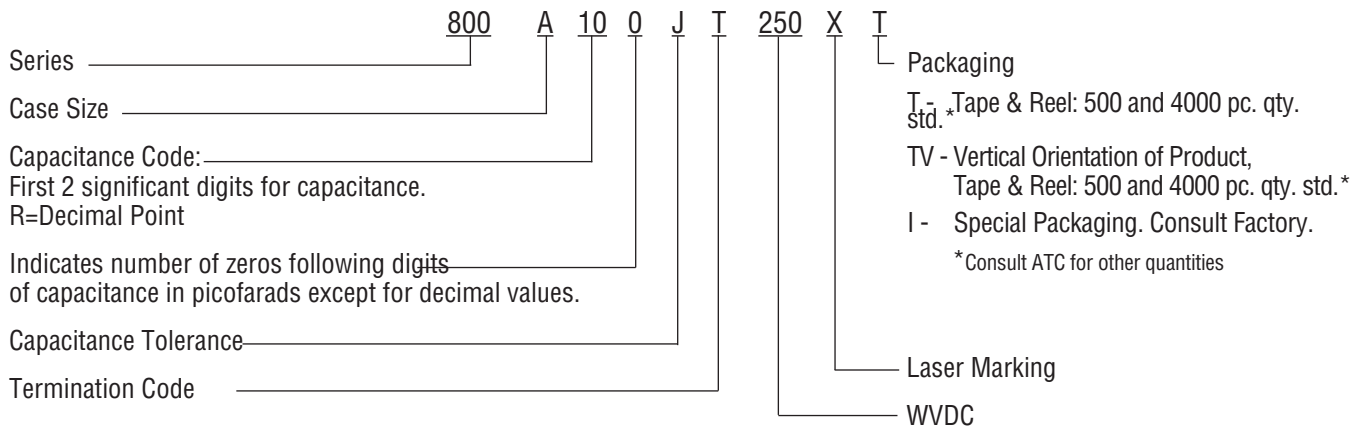
| CAP. CODE | CAP. (pF) | TOL.    | RATED WVDC | CAP. CODE     | CAP. (pF) | TOL.          | RATED WVDC | CAP. CODE | CAP. (pF) | TOL.          | RATED WVDC |
|-----------|-----------|---------|------------|---------------|-----------|---------------|------------|-----------|-----------|---------------|------------|
| 0R1       | 0.1       | B       | 250        | 2R2           | 2.2       | B, C, D       | 250        | 160       | 16        | F, G, J, K, M | 250        |
| 0R2       | 0.2       | B, C    |            | 2R4           | 2.4       |               |            | 180       | 18        |               |            |
| 0R3       | 0.3       |         |            | 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       | B, C, J, K, M |            | 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       |         |            | F, G, J, K, M | 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            |            |           |           |               |            |

$$VRMS = 0.707 \times WVDC$$

**SPECIAL VALUES, TOLERANCES AND MATCHING 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 800 A Series (case size A) 10 pF capacitor, J tolerance (±5%), 150 WVDC, with T termination (Tin Plated over Nickel Barrier, RoHS Compliant), laser marking and tape and reel packaging.

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

Consult factory for additional performance data.

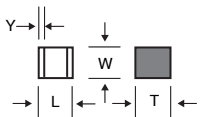
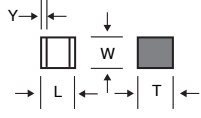
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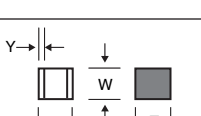
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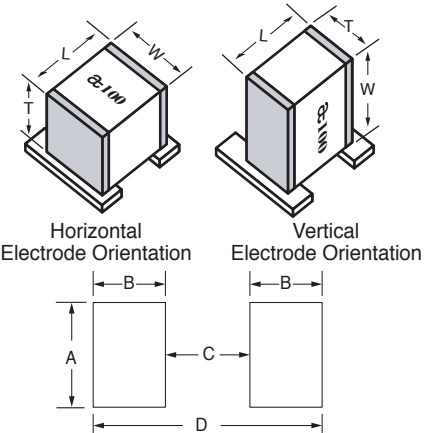
## ATC 800 A Capacitors: Mechanical Configurations

| ATC SERIES & CASE SIZE | ATC TERM. CODE | CASE SIZE & TYPE                                                                                                    | OUTLINES<br>W/T IS A TERMINATION SURFACE                                          | BODY DIMENSIONS<br>Inches (mm)               |                               |                     | LEAD AND TERMINATION<br>DIMENSIONS AND MATERIALS |                                                                        |
|------------------------|----------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------|-------------------------------|---------------------|--------------------------------------------------|------------------------------------------------------------------------|
|                        |                |                                                                                                                     |                                                                                   | LENGTH<br>(L)                                | WIDTH<br>(W)                  | THICKNESS<br>(T)    | OVERLAP<br>(Y)                                   | MATERIAL                                                               |
| 800A                   | T              | A <br>Solderable<br>Nickel Barrier |  | .055<br>+.015 -.010<br>(1.40<br>+0.38 -0.25) | .055 ±.015<br>(1.40 ±0.38)    | .057 (1.45)<br>max. | .010<br>+.010 -.005<br>(0.25<br>+0.25 -0.13)     | <b>RoHS Compliant</b><br>Tin Plated over<br>Nickel Barrier Termination |
| 800A                   | W              | A <br>Solder Plate                 |  | .055<br>+.015 -.010<br>(1.40<br>+0.38 -0.25) | .055 ±.015<br>(1.40<br>±0.38) | .057 (1.45)<br>max. | .010<br>+.010 -.005<br>(0.25<br>+0.25 -0.13)     | Tin/Lead Solder Plated over<br>Nickel Barrier Termination              |

## ATC 800 A Non-Magnetic Capacitors: Mechanical Configurations

| ATC SERIES & CASE SIZE | ATC TERM. CODE | CASE SIZE & TYPE                                                                                                        | OUTLINES<br>W/T IS A TERMINATION SURFACE                                          | BODY DIMENSIONS<br>Inches (mm)               |                            |                     | LEAD AND TERMINATION<br>DIMENSIONS AND MATERIALS |                                                                              |
|------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------|----------------------------|---------------------|--------------------------------------------------|------------------------------------------------------------------------------|
|                        |                |                                                                                                                         |                                                                                   | LENGTH<br>(L)                                | WIDTH<br>(W)               | THICKNESS<br>(T)    | OVERLAP<br>(Y)                                   | MATERIAL                                                                     |
| 800A                   | TN             | A <br>Non-Mag<br>Solderable<br>Barrier |  | .055<br>+.015 -.010<br>(1.40<br>+0.38 -0.25) | .055 ±.015<br>(1.40 ±0.38) | .057 (1.45)<br>max. | .010<br>+.010 -.005<br>(0.25<br>+0.25 -0.13)     | <b>RoHS Compliant</b><br>Tin Plated over<br>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.

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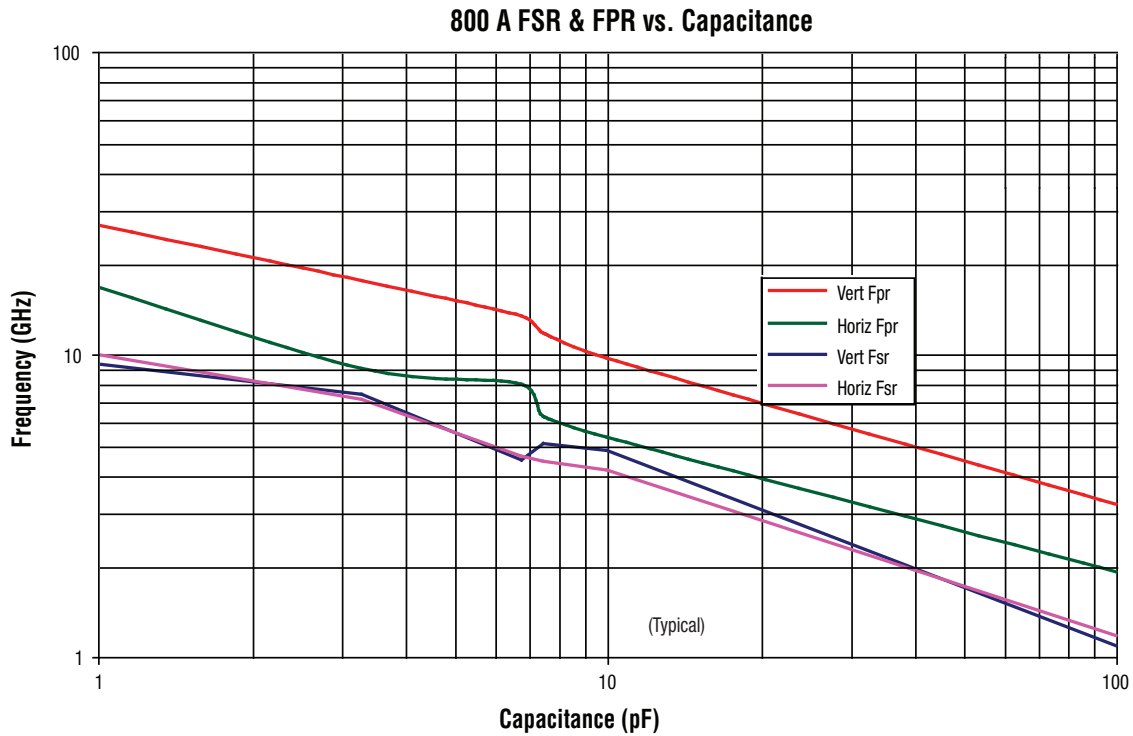
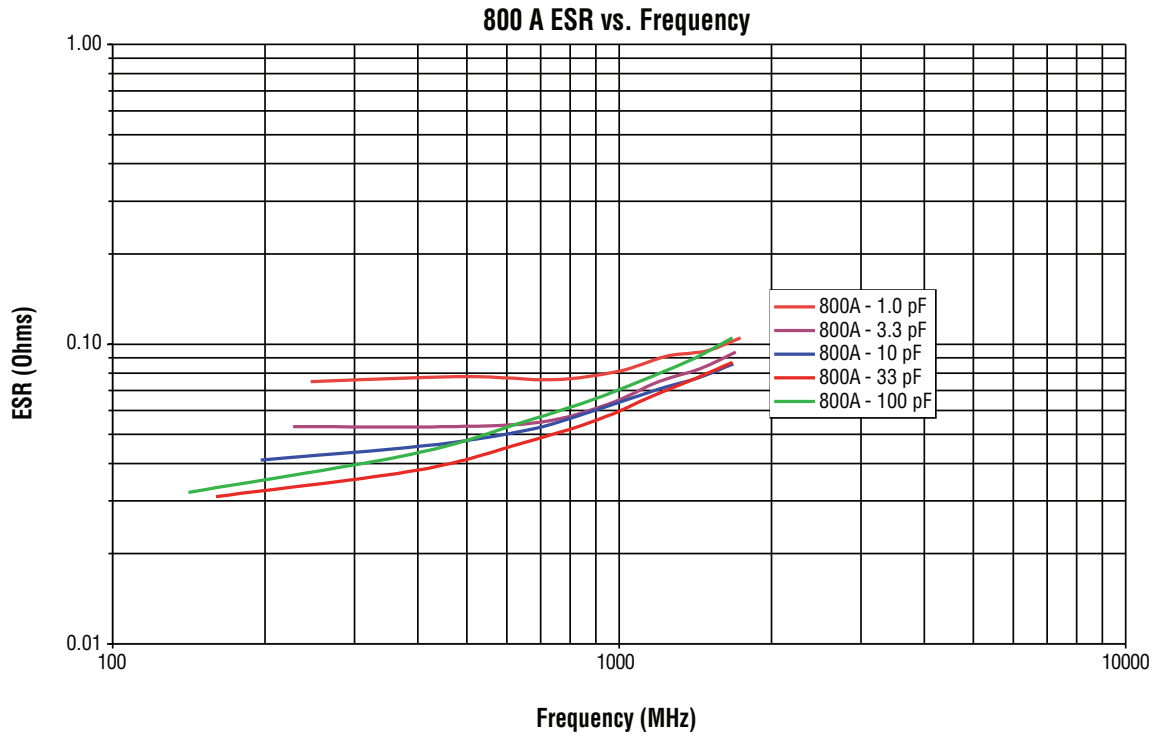
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# ATC 800 A Performance Data



## ATC 800 A Series Data Sheet Test Condition Description

Capacitors horizontally mounted in series microstrip configuration on 23.3-mil thick Rogers RO4350<sup>®</sup> softboard, 52-mils wide 1/2 oz. Cu traces.

**FSR** = lowest frequency at which S11 response, referenced at capacitor edge, crosses real axis on Smith Chart.

**FPR** = lowest frequency at which there is a notch in S21 magnitude response.

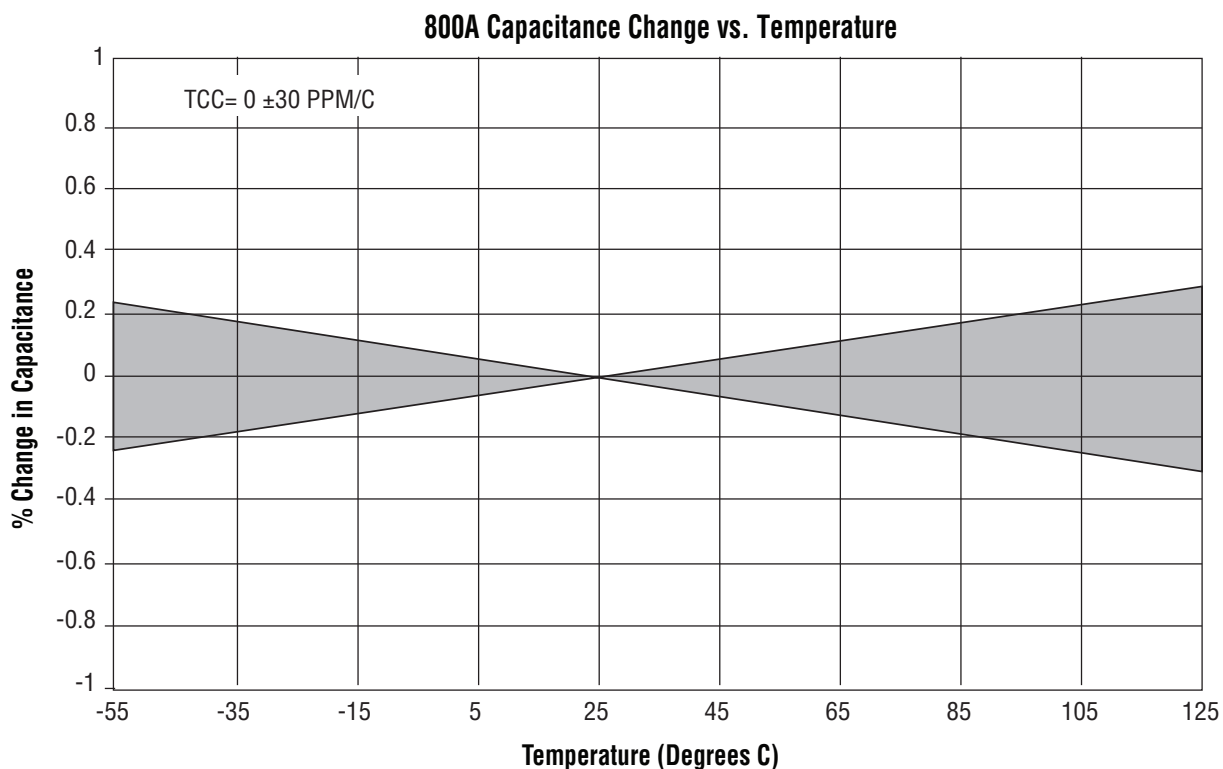
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# ATC 800 A Performance Data



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