

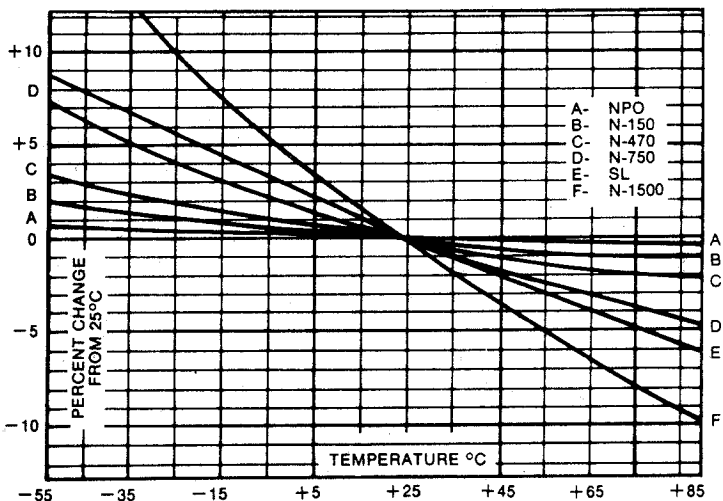


**TEMPERATURE COMPENSATING TYPE**

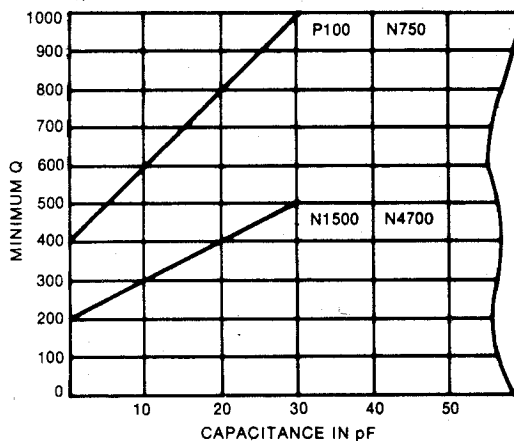
**GENERAL SPECIFICATIONS**

| EIA TYPE                                     |                | NPO   | SL                                   | N1500                                |
|--|----------------|---|--------------------------------------|--------------------------------------|
| OPERATING TEMPERATURE RANGE                  |                | -30 ~ + 85° C   | -30 ~ + 85° C                        | -30 ~ + 85° C                        |
| TEMPERATURE COEFFICIENT                      |                | 0 ± 60 ppm  | N330 ± 500 ppm                       | -1500 ± 250 ppm                      |
| CAPACITANCE CHANGE OVER TEMP. RANGE          |                | ± 1%  | ± 10%                                | ± 20%                                |
| Q FACTOR (MIN. @ 1 MHz)                      |                | 1000 (C ≥ 30 pf)<br>400+20C (C<30pf)                          | 1000 (C ≥ 30 pf)<br>400+20C (C<30pf) | 500 (C ≥ 30 pf)<br>200+10XC (C<30pf) |
| CAPACITANCE RANGE                            |                | 1 ~ 470 pf  | 1 ~ 1000 pf                          | 27 ~ 1000 pf                         |
| INSULATION RESISTANCE                        |                | MINIMUM 10,000 MEGOHMS  |                                      |                                      |
| LOAD LIFE TEST                               | CAP CHANGE     | ± 3%  | ± 30%                                | ± 50%                                |
| 85° C<br>1000 HRS.                           | Q FACTOR (MIN) | SHALL CONFORM TO INITIAL REQUIREMENTS PER ABOVE               |                                      |                                      |
|  | I.R. (MIN)     | 1,000M  | 1,000M                               | 1,000M                               |
| LOAD HUMIDITY TEST 40° C/90-95RH<br>500 HRS. |                | SHALL CONFORM TO THE REQUIREMENTS SPECIFIED IN LOAD LIFE TEST |                                      |                                      |

**CAPACITANCE VS TEMPERATURE**



**Q CHART**



**STANDARD INFORMATION**

| TOLERANCE   |
|-------------|
| Z = +80-20% |
| M = ±20%    |
| K = ±10%    |
| J = ±5%     |
| C = ±.25pf  |
| D = ±.5pf   |



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**STC SERIES**

**TEMPERATURE COMPENSATING TYPE**  
**STANDARD VALUES AND DIMENSIONS (BY PFD)**  
**50WVDC AND 100WVDC - INCHES AND (MM)**

| DIMENSION      |                 | TEMPERATURE CHARACTERISTIC |         |         |         |          |          |          |          |
|----------------|-----------------|----------------------------|---------|---------|---------|----------|----------|----------|----------|
| D<br>DIAMETER  | S<br>LEAD SPACE | NPO                        | N150    | N470    | N750    | SL       | N1500    | N2200    | N3300    |
| .220<br>(5.5)  | .250<br>(6.35)  | 1-47                       | 1-47    | 1-47    | 1-47    | 1-100    | 27-100   | 33-150   | 100-390  |
| .256<br>(6.5)  | .250<br>(6.35)  | 50-100                     | 50-100  | 50-100  | 50-100  | 120-220  | 120-220  | 180-270  | 400-680  |
| .335<br>(8.5)  | .250<br>(6.35)  | 120-150                    | 120-150 | 120-150 | 120-150 | 250-470  | 250-470  | 300-560  | 720-1000 |
| .413<br>(10.5) | .250<br>(6.35)  | 850-220                    | 180-220 | 180-220 | 180-250 | 500-620  | 500-620  | 620-1000 |          |
| .500<br>(12.5) | .250<br>(6.35)  | 250-300                    | 250-300 | 250-300 | 270-390 | 680-1000 | 620-1000 |          |          |
| .570<br>(14.5) | .250<br>(6.35)  | 330-470                    |         |         |         |          |          |          |          |

**250WVDC - INCHES AND (mm)**

| DIMENSION      |                 | TEMPERATURE CHARACTERISTIC |         |         |         |         |         |          |          |
|----------------|-----------------|----------------------------|---------|---------|---------|---------|---------|----------|----------|
| D<br>DIAMETER  | S<br>LEAD SPACE | NPO                        | N150    | N470    | N750    | SL      | N1500   | N2200    | N3300    |
| .220<br>(5.5)  | .250<br>(6.35)  | 1-22                       | 1-22    | 1-22    | 1-30    | 1-68    | 27-68   | 33-82    | 100-270  |
| .260<br>(6.5)  | .250<br>(6.35)  | 25-39                      | 25-39   | 25-39   | 33-47   | 70-100  | 70-100  | 100-150  | 300-470  |
| .335<br>(8.5)  | .250<br>(6.35)  | 47-82                      | 47-82   | 47-82   | 50-120  | 120-220 | 120-220 | 180-330  | 500-1000 |
| .413<br>(10.5) | .250<br>(6.35)  | 100-150                    | 100-150 | 100-150 | 130-200 | 250-390 | 250-390 | 350-560  |          |
| .500<br>(12.5) | .250<br>(6.35)  | 180-270                    | 180-270 | 180-270 | 220-270 | 400-680 | 400-680 | 680-1000 |          |
| .570<br>(14.5) | .250<br>(6.35)  | 330-390                    | 300-390 | 300-390 | 300-390 | 700-820 | 700-820 |          |          |

**500WVDC - INCHES AND (mm)**

| DIMENSION      |                 | TEMPERATURE CHARACTERISTIC |         |         |         |         |         |         |          |
|----------------|-----------------|----------------------------|---------|---------|---------|---------|---------|---------|----------|
| D<br>DIAMETER  | S<br>LEAD SPACE | NPO                        | N150    | N470    | N750    | SL      | N1500   | N2200   | N3300    |
| .220<br>(5.5)  | .250<br>(6.35)  | 1-22                       | 1-22    | 1-22    | 1-27    | 1-47    | 27-47   | 33-68   | 100-270  |
| .256<br>(6.5)  | .250<br>(6.35)  | 25-39                      | 25-39   | 25-39   | 30-39   | 50-100  | 50-100  | 82-120  | 300-390  |
| .335<br>(8.5)  | .250<br>(6.35)  | 47-82                      | 47-82   | 47-82   | 40-82   | 120-180 | 120-180 | 130-220 | 400-680  |
| .413<br>(10.5) | .250<br>(6.35)  | 91-120                     | 91-120  | 91-120  | 91-150  | 200-330 | 200-330 | 250-390 | 820-1000 |
| .500<br>(12.5) | .250<br>(6.35)  | 150-220                    | 150-220 | 150-220 | 180-220 | 350-500 | 350-500 | 400-560 |          |
| .570<br>(14.5) | .250<br>(6.35)  | 250-300                    |         |         |         | 560-680 | 560-680 |         |          |

**1000WVDC - INCHES AND (mm)**

| DIMENSION      |                 | TEMPERATURE CHARACTERISTIC |            |
|----------------|-----------------|----------------------------|------------|
| D<br>DIAMETER  | S<br>LEAD SPACE | NPO                        | (TOL)      |
| .217<br>(5.5)  | .250<br>(6.35)  | 1 ~ 4.7                    | (± 0.25PF) |
| .217<br>(5.5)  | .250<br>(6.35)  | 5 ~ 10                     | (± 0.5PF)  |
| .260<br>(6.5)  | .250<br>(6.35)  | 15 ~ 18                    | (± 5%)     |
| .260<br>(6.5)  | .250<br>(6.35)  | 22 ~ 27                    | (± 5%)     |
| .335<br>(8.5)  | .250<br>(6.35)  | 33 ~ 47                    | (± 5%)     |
| .335<br>(8.5)  | .250<br>(6.35)  | 56 ~ 68                    | (± 5%)     |
| .413<br>(10.5) | .250<br>(6.35)  | 100 ~ 150                  | (± 5%)     |

ABOVE ARE MAXIMUM SIZES.