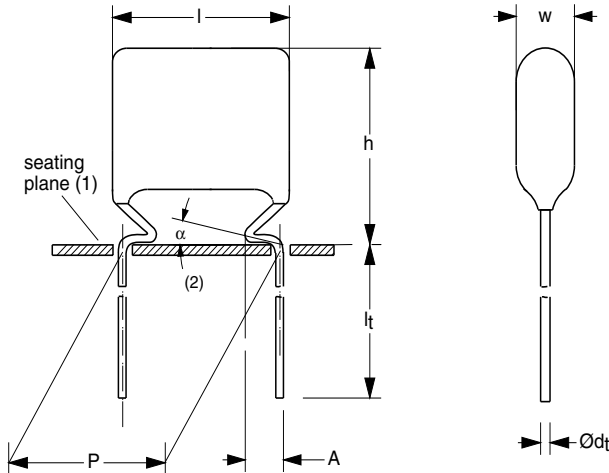
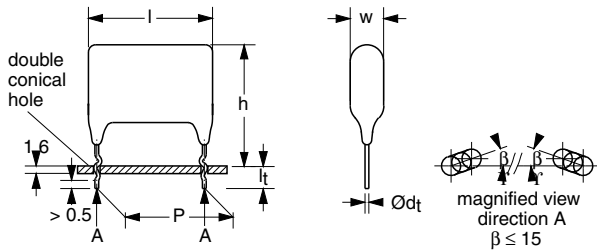


# Metallized Polyester Film Capacitors MKT Radial Epoxy Lacquered Type



Dimensions in mm

- (1) Hole  $\varnothing$  1.0 for  $d_t = 0.6$  mm  
Hole  $\varnothing$  1.3 for  $d_t = 0.8$  mm
- (2)  $0 \leq \alpha < 50^\circ$
- (3)  $A = 2.0 + 1.0/-0.5$  mm (pitch = 10.0 mm)  
 $A = 2.5 + 1.4/-0.5$  mm (pitch = 15.0 mm, 22.5 mm and 27.5 mm)



Dimensions in mm

## APPLICATIONS

Blocking and coupling. Bypass and energy reservoir

## MARKING

C-value; tolerance; rated voltage

## DIELECTRIC

Polyester film

## ELECTRODES

Vacuum deposited aluminium

## FEATURES

Available taped on reel and loose in box

- Material categorization:  
for definitions of compliance please see  
[www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



RoHS  
COMPLIANT

## COATING

Flame retardant epoxy material (UL-class 94 V-0)

## CONSTRUCTION

Wound mono construction

## LEADS

Tinned wire

## CAPACITANCE RANGE (E12 SERIES)

0.001 to 1.0  $\mu$ F

## CAPACITANCE TOLERANCE

$\pm 10\%$ ;  $\pm 5\%$

## RATED (DC) VOLTAGE

63 V; 100 V; 250 V; 400 V; 630 V

## RATED (AC) VOLTAGE

40 V; 63 V; 160 V; 220 V; 250 V

## CLIMATIC CATEGORY

55/105/56

## RATED TEMPERATURE

85  $^\circ$ C

## MAXIMUM APPLICATION TEMPERATURE

105  $^\circ$ C

## REFERENCE SPECIFICATIONS

IEC 60384-2

## PERFORMANCE GRADE

Grade 1 (long life)

## DETAIL SPECIFICATION

For more detailed data and test requirements see "Type detail specification HQN-384-02/101"



**COMPOSITION OF CATALOG NUMBER**

| TYPE AND PITCHES |         |
|------------------|---------|
| 368              | 10.0 mm |
|                  | 15.0 mm |
|                  | 22.5 mm |
|                  | 27.5 mm |

**CAPACITANCE**  
(numerically)

| MULTIPLIER<br>(nF) |   |
|--------------------|---|
| 0.1                | 2 |
| 1                  | 3 |
| 10                 | 4 |
| 100                | 5 |

Example:  
104 = 10 x 10 = 100 nF

|       |     |    |    |   |
|-------|-----|----|----|---|
| 2222  | 368 | XX | XX | X |
| BFC2* | 368 | XX | XX | X |

\* Use this partnumber for those with access to the Vishay's SAP system and Partners web-site within the Americas

| TYPE | PACKAGING   | LEAD CONFIGURATION                                     | ON REQUEST   |        |       |       |       |       |    |
|------|---|--|--|--------|-------|-------|-------|-------|----|
|      |   |  | C-TOL  | 63 V   | 100 V | 250 V | 400 V | 630 V |    |
| 368  | loose in box  | lead length 4.0 + 1.0/- 0.5 mm                         | ± 10 %   | 15     | 25    | 45    | 55    | 65    |    |
|      |   |  | ± 5 %  | 16     | 26    | 46    | 56    | 66    |    |
|      |   | lead length 4.0 + 1.0/- 0.5 mm (lock lead)             | ± 10 %   | -      | 90    | 90    | 90    | 90    |    |
|      |   | dimensions of this code numbers stays between brackets |  |        |       |       |       |       |    |
|      |   | lead length 3.5 ± 0.5 mm                               | ± 10 %   | 13     | 23    | 43    | 53    | 63    |    |
|      |   |  | ± 5 %  | 17     | 27    | 47    | 57    | 67    |    |
|      | long leads:<br>19.0 ± 4.0 mm for lead pitch = 15.0 mm<br>25.0 ± 4.0 mm for lead pitch = 22.5 mm<br>24.0 ± 4.0 mm for lead pitch = 27.5 mm | ± 10 %   | 11   | 21     | 41    | 51    | 61    |       |    |
|      |   | ± 5 %  | 12   | 22     | 42    | 52    | 62    |       |    |
|      |   | taped on reel  | H = 16.0 mm; P <sub>0</sub> = 12.7 mm;<br>reel diameter = 500 mm | ± 10 % | 18    | 28    | 48    | 58    | 68 |
|      |   |  |  | ± 5 %  | 19    | 29    | 49    | 59    | 69 |

**SPECIFIC REFERENCE DATA**

| DESCRIPTION   | VALUE                   |                          |                          |                 |                     |
|---|-------------------------|--------------------------|--------------------------|-----------------|---------------------|
|   | at 1 kHz                | at 10 kHz                | at 100 kHz               |                 |                     |
| Tangent of loss angle:  |                         |                          |                          |                 |                     |
| C ≤ 0.1 µF  | ≤ 75 x 10 <sup>-4</sup> | ≤ 130 x 10 <sup>-4</sup> | ≤ 225 x 10 <sup>-4</sup> |                 |                     |
| 0.1 µF < C ≤ 0.47 µF  | ≤ 75 x 10 <sup>-4</sup> | ≤ 130 x 10 <sup>-4</sup> | ≤ 300 x 10 <sup>-4</sup> |                 |                     |
| 0.47 µF < C ≤ 1.0 µF  | ≤ 75 x 10 <sup>-4</sup> | ≤ 130 x 10 <sup>-4</sup> | -                        |                 |                     |
| Rated voltage pulse slope (dU/dt) <sub>R</sub>                          | at 63 V (DC)            | at 100 V (DC)            | at 250 V (DC)            | at 400 V (DC)   | at 630 V (DC)       |
| P = 10 mm   | 30 V/µs                 | 30 V/µs                  | 70 V/µs                  | 110 V/µs        | 70 V/µs             |
| P = 15 mm   |                         | 20 V/µs                  | 28 V/µs                  | 44 V/µs         | 70 V/µs             |
| P = 22.5 mm   |                         | 8 V/µs                   | 12 V/µs                  | 20 V/µs         | 28 V/µs             |
| P = 27.5 mm   |                         | 7 V/µs                   | 10 V/µs                  | 16 V/µs         | 24 V/µs             |
| R between leads, for C ≤ 0.33 µF:                                       |                         |                          |                          |                 |                     |
| at 10 V; 1 minute   | > 15000 MΩ              |                          |                          |                 |                     |
| at 100 V; 1 minute  |                         | > 15000 MΩ               | > 30000 MΩ               | > 30000 MΩ      |                     |
| at 500 V; 1 minute  |                         |                          |                          |                 | > 30000 MΩ          |
| RC between leads, for C > 0.33 µF:                                      |                         |                          |                          |                 |                     |
| at 10 V; 1 minute   | > 5000 s                |                          |                          |                 |                     |
| at 100 V; 1 minute  |                         | > 5000 s                 | > 10000 s                | > 10000 s       |                     |
| at 500 V; 1 minute  |                         |                          |                          |                 | > 10000 s           |
| R between interconnecting leads and casing;                             |                         |                          |                          |                 |                     |
| at 10 V; 1 minute   | > 30000 MΩ              |                          |                          |                 |                     |
| at 100 V; 1 minute  |                         | > 30000 MΩ               | > 30000 MΩ               | > 30000 MΩ      |                     |
| at 500 V; 1 minute  |                         |                          |                          |                 | > 30000 MΩ          |
| Withstanding (DC) voltage (cut off current 10 mA);<br>rise time 100 V/s | 100 V; 1 minute         | 160 V; 1 minute          | 400 V; 1 minute          | 640 V; 1 minute | 1008 V;<br>1 minute |
| Withstanding (DC) voltage between leads and case                        | 200 V; 1 minute         | 200 V; 1 minute          | 500 V; 1 minute          | 800 V; 1 minute | 1260 V;<br>1 minute |



$U_{Rdc} = 63 \text{ V}$ ;  $U_{Rac} = 40 \text{ V}$

| C<br>( $\mu\text{F}$ )   | DIMENSIONS<br>$w_{\text{max}} \times h_{\text{max}} \times l_{\text{max}}$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 368 ..... AND PACKAGING |             |                  |      |                                   |      |
|--|--|-------------|---|-------------|------------------|------|-----------------------------------|------|
|  |  |             | LOOSE IN BOX                                |             |                  | REEL | LOOSE IN BOX                      |      |
|  |  |             | $l_t = 4.0 + 1.0/-0.5 \text{ mm}$           | short leads | long leads       | SPQ  | $l_t = 4.0 + 1.0/-0.5 \text{ mm}$ | SPQ  |
|  |  |             | C-tol = $\pm 10 \%$                         | SPQ         | SPQ              |      | C-tol = $\pm 10 \%$               |      |
| last 5 digits of catalog number  | last 5 digits of catalog number  |             |   |             |                  |      |                                   |      |
| <b>Pitch = <math>10.0 \pm 0.4 \text{ mm}</math>; <math>d_t = 0.60 \pm 0.06 \text{ mm}</math></b> |  |             |   |             | <b>lock lead</b> |      |                                   |      |
| 0.22   | 4.2 x 13.2 (15.5) x 12.5   | 0.5         | 15224                                       | 2000        | 1000             | 1300 | 90316                             | 1100 |
| 0.27   | 4.0 x 12.8 (15.5) x 12.5   | 0.5         | 15274                                       | 2000        | 1000             | 1300 | 90317                             | 1100 |
| 0.33   | 4.3 x 13.1 (15.5) x 12.5   | 0.5         | 15334                                       | 2000        | 1000             | 1300 | 90318                             | 1100 |
| 0.39   | 4.2 x 12.9 (15.5) x 12.5   | 0.5         | 15394                                       | 2000        | 1000             | 1300 | 90319                             | 1100 |
| 0.47   | 4.3 x 13.4 (16.0) x 12.5   | 0.5         | 15474                                       | 2000        | 1000             | 1200 | 90321                             | 1000 |
| 0.56   | 4.7 x 13.7 (16.0) x 12.5   | 0.5         | 15564                                       | 2000        | 1000             | 1200 | 90322                             | 1000 |
| 0.68   | 5.1 x 14.1 (16.5) x 12.5   | 0.6         | 15684                                       | 2000        | 1000             | 1100 | 90323                             | 1500 |
| 0.82   | 5.5 x 14.5 (17.0) x 12.5   | 0.6         | 15824                                       | 2000        | 1000             | 1000 | 90324                             | 1250 |
| 1.0  | 6.0 x 15.0 (17.5) x 12.5   | 0.8         | 15105                                       | 2000        | 1000             | 900  | 90325                             | 1250 |

$U_{Rdc} = 100 \text{ V}$ ;  $U_{Rac} = 63 \text{ V}$

| C<br>( $\mu\text{F}$ )   | DIMENSIONS<br>$w_{\text{max}} \times h_{\text{max}} \times l_{\text{max}}$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 368 ..... AND PACKAGING |             |                  |      |                                   |      |
|--|--|-------------|---|-------------|------------------|------|-----------------------------------|------|
|  |  |             | LOOSE IN BOX                                |             |                  | REEL | LOOSE IN BOX                      |      |
|  |  |             | $l_t = 4.0 + 1.0/-0.5 \text{ mm}$           | short leads | long leads       | SPQ  | $l_t = 4.0 + 1.0/-0.5 \text{ mm}$ | SPQ  |
|  |  |             | C-tol = $\pm 10 \%$                         | SPQ         | SPQ              |      | C-tol = $\pm 10 \%$               |      |
| last 5 digits of catalog number  | last 5 digits of catalog number  |             |   |             |                  |      |                                   |      |
| <b>Pitch = <math>10.0 \pm 0.4 \text{ mm}</math>; <math>d_t = 0.60 \pm 0.06 \text{ mm}</math></b> |  |             |   |             | <b>lock lead</b> |      |                                   |      |
| 0.056  | 4.0 x 13.0 (15.0) x 12.5   | 0.4         | 25563                                       | 2000        | 1000             | 1500 | 90205                             | 1250 |
| 0.068  |  |             | 25683                                       |             |                  |      | 90206                             |      |
| 0.082  | 3.7 x 12.7 (15.0) x 12.5   | 0.4         | 25823                                       | 2000        | 1000             | 1500 | 90207                             | 1250 |
| 0.10   | 4.0 x 13.0 (15.0) x 12.5   | 0.4         | 25104                                       | 2000        | 1000             | 1500 | 90208                             | 1250 |
| 0.12   | 4.3 x 13.3 (15.0) x 12.5   | 0.4         | 25124                                       | 2000        | 1000             | 1500 | 90209                             | 1250 |
| 0.15   | 3.9 x 12.9 (15.0) x 12.5   | 0.4         | 25154                                       | 2000        | 1000             | 1500 | 90211                             | 1250 |
| 0.18   | 4.2 x 13.2 (15.5) x 12.5   | 0.5         | 25184                                       | 2000        | 1000             | 1300 | 90212                             | 1100 |
| 0.22   | 4.5 x 13.6 (16.0) x 12.5   | 0.5         | 25224                                       | 2000        | 1000             | 1200 | 90213                             | 1000 |
| <b>Pitch = <math>15.0 \pm 0.4 \text{ mm}</math>; <math>d_t = 0.80 \pm 0.08 \text{ mm}</math></b> |  |             |   |             | <b>lock lead</b> |      |                                   |      |
| 0.27   | 5.0 x 14.0 (17.0) x 17.5   | 0.6         | 25274                                       | 2000        | 1000             | 1200 | 90214                             | 1750 |
| 0.33   |  |             | 25334                                       |             |                  |      | 90215                             |      |
| 0.39   |  |             | 25394                                       |             |                  |      | 90216                             |      |
| 0.47   | 5.5 x 14.5 (17.5) x 17.5   | 0.7         | 25474                                       | 2000        | 1000             | 1100 | 90217                             | 1500 |
| 0.56   |  |             | 25564                                       |             |                  |      | 90218                             |      |
| 0.68   | 6.0 x 15.0 (18.0) x 17.5   | 0.9         | 25684                                       | 2000        | 1000             | 1000 | 90219                             | 1500 |
| 0.82   | 6.5 x 15.5 (18.5) x 17.5   | 1.0         | 25824                                       | 1000        | 1000             | 900  | 90221                             | 1250 |
| 1.0  | 7.5 x 16.5 (19.5) x 17.5   | 1.3         | 25105                                       | 1000        | 1000             | 800  | 90222                             | 1000 |



| C<br>( $\mu$ F)  | DIMENSIONS<br>$w_{max} \times h_{max} \times l_{max}$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 368 ..... AND PACKAGING |             |            |       |                           |       |     |
|--|---|-------------|---|-------------|------------|-------|---------------------------|-------|-----|
|  |   |             | LOOSE IN BOX                                |             |            | REEL  | LOOSE IN BOX              |       |     |
|  |   |             | $l_t = 4.0 + 1.0/-0.5$ mm                   | short leads | long leads | SPQ   | $l_t = 4.0 + 1.0/-0.5$ mm | SPQ   |     |
|  |   |             | C-tol = $\pm 10$ %                          | SPQ         | SPQ        |       | C-tol = $\pm 10$ %        |       |     |
| last 5 digits of catalog number  | last 5 digits of catalog number                               |             |   |             |            |       |                           |       |     |
| <b>Pitch = 22.5 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b> |   |             |   |             |            |       | <b>lock lead</b>          |       |     |
| 1.2  | 6.0 x 18.0 (21.0) x 26.0                                      | 2.5         | 25125                                       | 1000        | 1000       | SPQ   | 90223                     | 1000  |     |
| 1.5  |   |             | 25155                                       |             |            |       | 90224                     |       |     |
| 1.8  | 7.0 x 19.0 (22.0) x 26.0                                      | 3.2         | 25185                                       | 1000        | 1000       |       | 90225                     | 900   |     |
| 2.2  | 7.5 x 19.5 (23.0) x 26.0                                      | 3.5         | 25225                                       | 1000        | 500        |       | 90226                     | 750   |     |
| 2.7  | 8.5 x 21.5 (24.0) x 26.0                                      | 4.1         | 25275                                       | 1000        | 500        |       | 90227                     | 600   |     |
| 3.3  | 9.0 x 22.0 (24.5) x 26.0                                      | 4.5         | 25335                                       | 1000        | 500        |       | 90228                     | 600   |     |
| <b>Pitch = 27.5 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b> |   |             |   |             |            |       | <b>lock lead</b>          |       |     |
| 3.9  | 9.0 x 22.0 (24.0) x 30.0                                      | 4.8         | 25395                                       | 500         | 500        |       | SPQ                       | 90229 | 500 |
| 4.7  | 10.0 x 23.0 (25.0) x 30.0                                     | 5.5         | 25475                                       | 500         | 500        | 90178 |                           | 400   |     |
| 5.6  | 11.0 x 24.0 (26.0) x 30.0                                     | 6.2         | 25565                                       | 500         | 250        | 90231 |                           | 350   |     |
| 6.8  | 12.0 x 25.0 (27.0) x 30.0                                     | 6.8         | 25685                                       | 500         | 250        | 90232 |                           | 350   |     |

$U_{Rdc} = 250$  V;  $U_{Rac} = 160$  V

| C<br>( $\mu$ F)  | DIMENSIONS<br>$w_{max} \times h_{max} \times l_{max}$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 368 ..... AND PACKAGING |             |            |      |                           |      |
|--|---|-------------|---|-------------|------------|------|---------------------------|------|
|  |   |             | LOOSE IN BOX                                |             |            | REEL | LOOSE IN BOX              |      |
|  |   |             | $l_t = 4.0 + 1.0/-0.5$ mm                   | short leads | long leads | SPQ  | $l_t = 4.0 + 1.0/-0.5$ mm | SPQ  |
|  |   |             | C-tol = $\pm 10$ %                          | SPQ         | SPQ        |      | C-tol = $\pm 10$ %        |      |
| last 5 digits of catalog number  | last 5 digits of catalog number                               |             |   |             |            |      |                           |      |
| <b>Pitch = 10.0 <math>\pm</math> 0.4 mm; <math>d_t = 0.60 \pm 0.06</math> mm</b> |   |             |   |             |            |      | <b>lock lead</b>          |      |
| 0.027  | 4.2 x 13.0 (15.0) x 12.5                                      | 0.4         | 45273                                       | 2000        | 1000       | 1500 | 90233                     | 1250 |
| 0.033  | 4.6 x 13.0 (15.0) x 12.5                                      | 0.5         | 45333                                       | 2000        | 1000       | 1300 | 90234                     | 1250 |
| 0.039  | 4.0 x 13.0 (15.0) x 12.5                                      | 0.4         | 45393                                       | 2000        | 1000       | 1500 | 90235                     | 1250 |
| 0.047  | 4.5 x 13.5 (15.5) x 12.5                                      | 0.5         | 45473                                       | 2000        | 1000       | 1500 | 90176                     | 1250 |
| 0.056  | 4.6 x 13.5 (15.5) x 12.5                                      | 0.5         | 45563                                       | 2000        | 1000       | 1300 | 90236                     | 1100 |
| 0.068  |   |             | 45683                                       |             |            |      | 90237                     |      |
| 0.082  | 4.4 x 13.4 (16.0) x 12.5                                      | 0.5         | 45823                                       | 2000        | 1000       | 1200 | 90238                     | 1000 |
| 0.10   | 4.7 x 13.7 (16.0) x 12.5                                      | 0.5         | 45104                                       | 2000        | 1000       | 1200 | 90177                     | 1000 |
| <b>Pitch = 15.0 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b> |   |             |   |             |            |      | <b>lock lead</b>          |      |
| 0.12   | 5.0 x 14.0 (17.0) x 17.5                                      | 0.6         | 45124                                       | 2000        | 1000       | 1200 | 90239                     | 1750 |
| 0.15   |   |             | 45154                                       |             |            |      | 90241                     |      |
| 0.18   | 5.5 x 14.5 (17.5) x 17.5                                      | 0.7         | 45184                                       | 2000        | 1000       | 1100 | 90242                     | 1500 |
| 0.22   | 6.0 x 15.0 (18.0) x 17.5                                      | 0.9         | 45224                                       | 2000        | 1000       | 1000 | 90243                     | 1500 |
| 0.27   | 6.0 x 15.5 (18.5) x 17.5                                      | 1.0         | 45274                                       | 2000        | 1000       | 900  | 90244                     | 1250 |
| 0.33   | 6.8 x 16.0 (19.0) x 17.5                                      | 1.2         | 45334                                       | 1000        | 1000       | 800  | 90245                     | 1250 |
| <b>Pitch = 22.5 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b> |   |             |   |             |            |      | <b>lock lead</b>          |      |
| 0.39   | 5.0 x 17.0 (20.0) x 26.0                                      | 1.8         | 45394                                       | 1000        | 1000       | SPQ  | 90246                     | 1250 |
| 0.47   | 5.5 x 17.5 (20.5) x 26.0                                      | 2.2         | 45474                                       | 1000        | 1000       |      | 90247                     | 1250 |
| 0.56   | 6.0 x 18.0 (21.0) x 26.0                                      | 2.5         | 45564                                       | 1000        | 1000       |      | 90248                     | 1000 |
| 0.68   | 6.6 x 18.5 (21.5) x 26.0                                      | 2.8         | 45684                                       | 1000        | 1000       |      | 90249                     | 1000 |
| 0.82   | 7.2 x 19.0 (22.0) x 26.0                                      | 3.2         | 45824                                       | 1000        | 1000       |      | 90251                     | 900  |
| 1.0  | 8.0 x 20.0 (23.0) x 26.0                                      | 3.8         | 45105                                       | 1000        | 500        |      | 90252                     | 750  |



| C<br>( $\mu$ F)                                     | DIMENSIONS<br>$w_{max} \times h_{max} \times l_{max}$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 368 ..... AND PACKAGING |             |            |      |                              |     |
|---|---|-------------|---|-------------|------------|------|------------------------------|-----|
|   |   |             | LOOSE IN BOX                                |             |            | REEL | LOOSE IN BOX                 |     |
|   |   |             | $l_t =$<br>4.0 + 1.0/- 0.5 mm               | short leads | long leads | SPQ  | $l_t =$<br>4.0 + 1.0/-0.5 mm | SPQ |
|   |   |             | C-tol = $\pm$ 10 %                          | SPQ         | SPQ        |      | C-tol = $\pm$ 10 %           |     |
| last 5 digits of<br>catalog number                  | last 5 digits of<br>catalog number                            |             |   |             |            |      |                              |     |
| Pitch = 27.5 $\pm$ 0.4 mm; $d_t = 0.80 \pm 0.08$ mm |   |             |   |             |            |      | lock lead                    |     |
| 1.2   | 8.0 x 21.0 (23.0) x 30.0                                      | 4.1         | 45125                                       | 500         | 500        |      | 90253                        | 600 |
| 1.5   | 9.0 x 22.0 (25.0) x 30.0                                      | 4.8         | 45155                                       | 500         | 500        |      | 90254                        | 450 |
| 1.8   | 10.0 x 23.0 (26.0) x 30.0                                     | 5.5         | 45185                                       | 500         | 500        |      | 90255                        | 400 |
| 2.2   | 11.0 x 24.0 (27.0) x 30.0                                     | 6.2         | 45225                                       | 500         | 250        |      | 90256                        | 350 |

$U_{Rdc} = 400$  V;  $U_{Rac} = 220$  V

| C<br>( $\mu$ F)                                     | DIMENSIONS<br>$w_{max} \times h_{max} \times l_{max}$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 368 ..... AND PACKAGING |             |            |      |                              |      |
|---|---|-------------|---|-------------|------------|------|------------------------------|------|
|   |   |             | LOOSE IN BOX                                |             |            | REEL | LOOSE IN BOX                 |      |
|   |   |             | $l_t =$<br>4.0 + 1.0/- 0.5 mm               | short leads | long leads | SPQ  | $l_t =$<br>4.0 + 1.0/-0.5 mm | SPQ  |
|   |   |             | C-tol = $\pm$ 10 %                          | SPQ         | SPQ        |      | C-tol = $\pm$ 10 %           |      |
| last 5 digits of<br>catalog number                  | last 5 digits of<br>catalog number                            |             |   |             |            |      |                              |      |
| Pitch = 10.0 $\pm$ 0.4 mm; $d_t = 0.60 \pm 0.06$ mm |   |             |   |             |            |      | lock lead                    |      |
| 0.0010  | 4.5 x 13.5 (15.5) x 12.5                                      | 0.5         | 55102                                       | 2000        | 1000       | 1500 | 90257                        | 1100 |
| 0.0012  |   |             | 55122                                       |             |            |      | 90258                        |      |
| 0.0015  |   |             | 55152                                       |             |            |      | 90259                        |      |
| 0.0018  |   |             | 55182                                       |             |            |      | 90261                        |      |
| 0.0022  | 4.0 x 13.0 (15.5) x 12.5                                      | 0.5         | 55222                                       | 2000        | 1000       | 1500 | 90262                        | 1100 |
| 0.0027  | 4.3 x 13.3 (15.5) x 12.5                                      | 0.5         | 55272                                       | 2000        | 1000       | 1500 | 90263                        | 1100 |
| 0.0033  | 4.6 x 13.6 (15.5) x 12.5                                      | 0.5         | 55332                                       | 2000        | 1000       | 1500 | 90264                        | 1100 |
| 0.0039  | 4.0 x 13.0 (15.5) x 12.5                                      | 0.5         | 55392                                       | 2000        | 1000       | 1500 | 90265                        | 1100 |
| 0.0047  | 4.1 x 13.2 (15.5) x 12.5                                      | 0.5         | 55472                                       | 2000        | 1000       | 1500 | 90266                        | 1100 |
| 0.0056  | 4.6 x 13.6 (15.5) x 12.5                                      | 0.5         | 55562                                       | 2000        | 1000       | 1500 | 90267                        | 1100 |
| 0.0068  |   |             | 55682                                       |             |            |      | 90268                        |      |
| 0.0082  |   |             | 55822                                       |             |            |      | 90269                        |      |
| 0.010   |   |             | 55103                                       |             |            |      | 90271                        |      |
| 0.012   | 4.0 x 13.0 (15.5) x 12.5                                      | 0.5         | 55123                                       | 2000        | 1000       | 1500 | 90272                        | 1100 |
| 0.015   | 4.1 x 13.0 (15.5) x 12.5                                      | 0.5         | 55153                                       | 2000        | 1000       | 1300 | 90273                        | 1100 |
| 0.018   | 4.4 x 13.0 (15.5) x 12.5                                      | 0.5         | 55183                                       | 2000        | 1000       | 1500 | 90274                        | 1100 |
| 0.022   | 4.2 x 12.9 (15.5) x 12.5                                      | 0.5         | 55223                                       | 2000        | 1000       | 1500 | 90175                        | 1100 |
| 0.027   | 4.2 x 13.2 (15.5) x 12.5                                      | 0.5         | 55273                                       | 2000        | 1000       | 1300 | 90275                        | 1100 |
| 0.033   | 4.6 x 13.7 (15.5) x 12.5                                      | 0.5         | 55333                                       | 2000        | 1000       | 1300 | 90188                        | 1100 |
| Pitch = 15.0 $\pm$ 0.4 mm; $d_t = 0.80 \pm 0.08$ mm |   |             |   |             |            |      | lock lead                    |      |
| 0.039   | 5.0 x 13.9 (16.5) x 17.5                                      | 0.6         | 55393                                       | 2000        | 1000       | 1200 | 90276                        | 2000 |
| 0.047   | 5.4 x 14.5 (17.0) x 17.5                                      | 0.7         | 55473                                       | 2000        | 1000       | 1200 | 90277                        | 1750 |
| 0.056   | 5.0 x 13.7 (16.5) x 17.5                                      | 0.6         | 55563                                       | 2000        | 1000       | 1200 | 90278                        | 2000 |
| 0.068   | 5.0 x 13.5 (16.5) x 17.5                                      | 0.6         | 55683                                       | 2000        | 1000       | 1200 | 90279                        | 2000 |
| 0.082   | 4.8 x 14.0 (16.5) x 17.5                                      | 0.6         | 55823                                       | 2000        | 1000       | 1100 | 90281                        | 2000 |
| 0.10  | 5.3 x 14.5 (17.5) x 17.5                                      | 0.7         | 55104                                       | 2000        | 1000       | 1000 | 90186                        | 1500 |
| 0.12  | 5.7 x 15.0 (18.0) x 17.5                                      | 0.9         | 55124                                       | 1000        | 1000       | 900  | 90282                        | 1500 |
| 0.15  | 6.4 x 15.5 (18.5) x 17.5                                      | 1.0         | 55154                                       | 1000        | 1000       | 800  | 90187                        | 1250 |



| C<br>( $\mu$ F)  | DIMENSIONS<br>$w_{max} \times h_{max} \times l_{max}$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 368 ..... AND PACKAGING |             |            |      |                           |      |
|--|---|-------------|---|-------------|------------|------|---------------------------|------|
|  |   |             | LOOSE IN BOX                                |             |            | REEL | LOOSE IN BOX              |      |
|  |   |             | $l_t = 4.0 + 1.0/-0.5$ mm                   | short leads | long leads | SPQ  | $l_t = 4.0 + 1.0/-0.5$ mm | SPQ  |
|  |   |             | C-tol = $\pm 10$ %                          | SPQ         | SPQ        |      | C-tol = $\pm 10$ %        |      |
| last 5 digits of catalog number  | last 5 digits of catalog number                               |             |   |             |            |      |                           |      |
| <b>Pitch = 22.5 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b> |   |             |   |             |            |      | <b>lock lead</b>          |      |
| 0.18   | 5.6 x 17.5 (20.5) x 26.0                                      | 2.2         | 55184                                       | 1000        | 1000       |      | 90283                     | 1250 |
| 0.22   | 6.3 x 18.5 (21.5) x 26.0                                      | 2.8         | 55224                                       | 1000        | 1000       |      | 90284                     | 1000 |
| 0.27   | 6.0 x 18.0 (21.0) x 26.0                                      | 2.5         | 55274                                       | 1000        | 1000       |      | 90285                     | 1000 |
| 0.33   | 6.4 x 18.5 (21.5) x 26.0                                      | 2.8         | 55334                                       | 1000        | 1000       |      | 90286                     | 1000 |
| 0.39   | 7.1 x 19.0 (21.5) x 26.0                                      | 2.8         | 55394                                       | 1000        | 1000       |      | 90287                     | 900  |
| 0.47   | 8.0 x 20.0 (22.5) x 26.0                                      | 3.8         | 55474                                       | 1000        | 500        |      | 90179                     | 750  |
| <b>Pitch = 27.5 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b> |   |             |   |             |            |      | <b>lock lead</b>          |      |
| 0.56   | 7.5 x 20.5 (22.5) x 30.0                                      | 3.8         | 55564                                       | 500         | 500        |      | 90288                     | 600  |
| 0.68   | 8.5 x 21.5 (23.5) x 30.0                                      | 4.5         | 55684                                       | 500         | 500        |      | 90289                     | 500  |
| 0.82   | 9.5 x 22.5 (24.5) x 30.0                                      | 5.2         | 55824                                       | 500         | 500        |      | 90291                     | 450  |
| 1.0  | 10.5 x 23.5 (26.5) x 30.0                                     | 5.8         | 55105                                       | 500         | 250        |      | 90292                     | 350  |

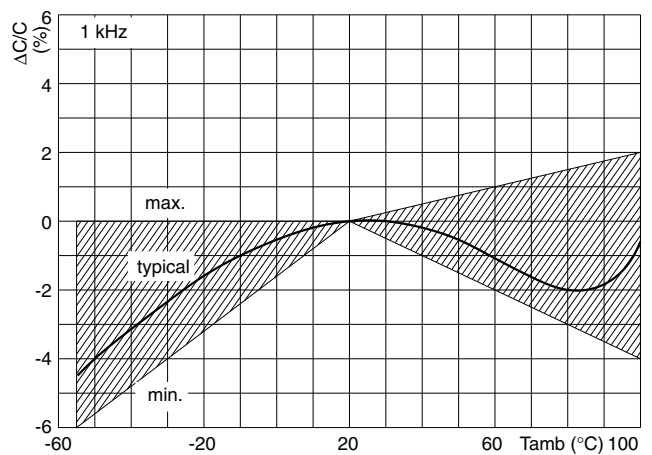
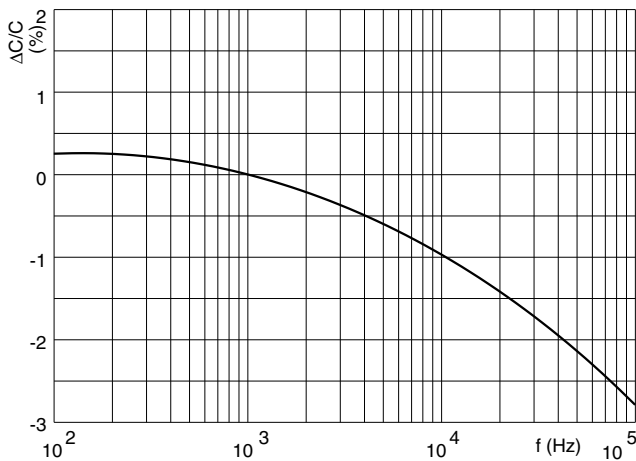
$U_{Rdc} = 630$  V;  $U_{Rac} = 250$  V

| C<br>( $\mu$ F)  | DIMENSIONS<br>$w_{max} \times h_{max} \times l_{max}$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 368 ..... AND PACKAGING |             |            |      |                           |      |
|--|---|-------------|---|-------------|------------|------|---------------------------|------|
|  |   |             | LOOSE IN BOX                                |             |            | REEL | LOOSE IN BOX              |      |
|  |   |             | $l_t = 4.0 + 1.0/-0.5$ mm                   | short leads | long leads | SPQ  | $l_t = 4.0 + 1.0/-0.5$ mm | SPQ  |
|  |   |             | C-tol = $\pm 10$ %                          | SPQ         | SPQ        |      | C-tol = $\pm 10$ %        |      |
| last 5 digits of catalog number  | last 5 digits of catalog number                               |             |   |             |            |      |                           |      |
| <b>Pitch = 10.0 <math>\pm</math> 0.4 mm; <math>d_t = 0.60 \pm 0.06</math> mm</b> |   |             |   |             |            |      | <b>lock lead</b>          |      |
| 0.010  | 4.3 x 13.1 (15.5) x 12.5                                      | 0.5         | 65103                                       | 2000        | 1000       | 1300 | 90293                     | 1100 |
| 0.012  | 4.6 x 13.4 (16.0) x 12.5                                      | 0.5         | 65123                                       | 2000        | 1000       | 1200 | 90294                     | 1000 |
| 0.015  | 4.9 x 13.9 (16.5) x 12.5                                      | 0.6         | 65153                                       | 2000        | 1000       | 1100 | 90295                     | 1500 |
| 0.018  | 5.3 x 14.3 (17.0) x 12.5                                      | 0.6         | 65183                                       | 2000        | 1000       | 1000 | 90296                     | 1250 |
| 0.022  | 5.9 x 14.9 (17.5) x 12.5                                      | 0.8         | 65223                                       | 2000        | 1000       | 900  | 90297                     | 1250 |
| <b>Pitch = 15.0 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b> |   |             |   |             |            |      | <b>lock lead</b>          |      |
| 0.027  | 5.5 x 14.5 (17.5) x 17.5                                      | 0.7         | 65273                                       | 2000        | 1000       | 1100 | 90298                     | 1500 |
| 0.033  | 6.0 x 15.0 (18.0) x 17.5                                      | 0.9         | 65333                                       | 2000        | 1000       | 1000 | 90299                     | 1500 |
| 0.039  | 6.3 x 15.5 (18.5) x 17.5                                      | 1.0         | 65393                                       | 2000        | 1000       | 900  | 90301                     | 1250 |
| 0.047  | 7.0 x 16.0 (19.0) x 17.5                                      | 1.2         | 65473                                       | 2000        | 1000       | 800  | 90302                     | 1250 |
| 0.056  | 7.5 x 16.5 (19.5) x 17.5                                      | 1.3         | 65563                                       | 1000        | 1000       | 800  | 90303                     | 1000 |
| 0.068  | 8.0 x 17.0 (20.0) x 17.5                                      | 1.4         | 65683                                       | 1000        | 1000       | 750  | 90304                     | 1000 |
| <b>Pitch = 22.5 <math>\pm</math> 0.4 mm; <math>d_t = 0.80 \pm 0.08</math> mm</b> |   |             |   |             |            |      | <b>lock lead</b>          |      |
| 0.082  | 6.1 x 18.0 (21.0) x 26.0                                      | 2.5         | 65823                                       | 1000        | 1000       |      | 90305                     | 1000 |
| 0.10   | 7.0 x 19.0 (22.0) x 26.0                                      | 3.2         | 65104                                       | 1000        | 1000       |      | 90306                     | 900  |
| 0.12   | 7.2 x 19.5 (22.5) x 26.0                                      | 3.5         | 65124                                       | 1000        | 1000       |      | 90307                     | 750  |
| 0.15   | 8.0 x 21.0 (23.0) x 26.0                                      | 3.8         | 65154                                       | 1000        | 500        |      | 90308                     | 750  |
| 0.18   | 9.0 x 22.0 (24.0) x 26.0                                      | 4.5         | 65184                                       | 1000        | 500        |      | 90309                     | 600  |
| 0.22   | 10.0 x 23.0 (25.0) x 26.0                                     | 5.2         | 65224                                       | 1000        | 500        |      | 90311                     | 550  |

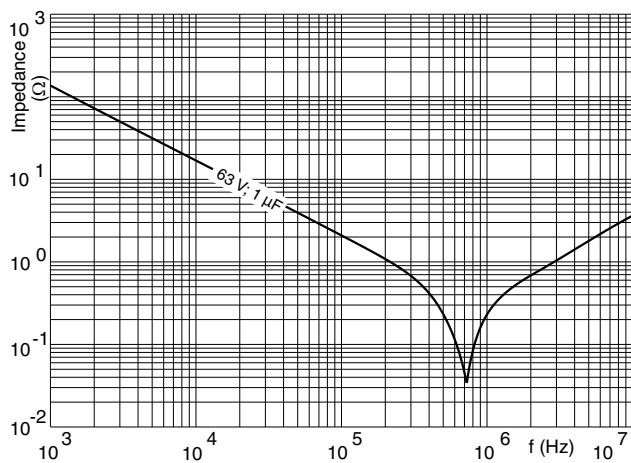


| C<br>( $\mu$ F)                                     | DIMENSIONS<br>$w_{max} \times h_{max} \times l_{max}$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 368 ..... AND PACKAGING |             |            |       |                              |     |
|---|---|-------------|---|-------------|------------|-------|------------------------------|-----|
|   |   |             | LOOSE IN BOX                                |             |            | REEL  | LOOSE IN BOX                 |     |
|   |   |             | $l_t =$<br>4.0 + 1.0/- 0.5 mm               | short leads | long leads | SPQ   | $l_t =$<br>4.0 + 1.0/-0.5 mm | SPQ |
|   |   |             | C-tol = $\pm$ 10 %                          | SPQ         | SPQ        |       | C-tol = $\pm$ 10 %           |     |
| last 5 digits of<br>catalog number                  | lock lead   |             |   |             |            |       |                              |     |
| Pitch = 27.5 $\pm$ 0.4 mm; $d_t = 0.80 \pm 0.08$ mm |   |             |   |             |            |       |                              |     |
| 0.27  | 10.0 x 23.0 (25.0) x 30.0                                     | 5.5         | 65274                                       | 500         | 500        | 90312 | 400                          |     |
| 0.33  | 11.5 x 24.5 (26.5) x 30.0                                     | 6.5         | 65334                                       | 500         | 250        | 90313 | 350                          |     |
| 0.39  | 12.5 x 25.5 (28.5) x 30.0                                     | 7.1         | 65394                                       | 500         | 250        | 90314 | 300                          |     |
| 0.47  | 14.0 x 27.0 (30.0) x 30.0                                     | 8.2         | 65474                                       | 250         | 250        | 90315 | 250                          |     |

**CAPACITANCE**

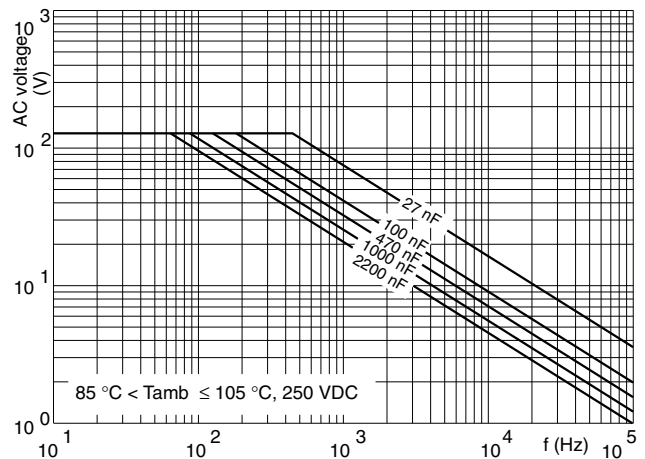
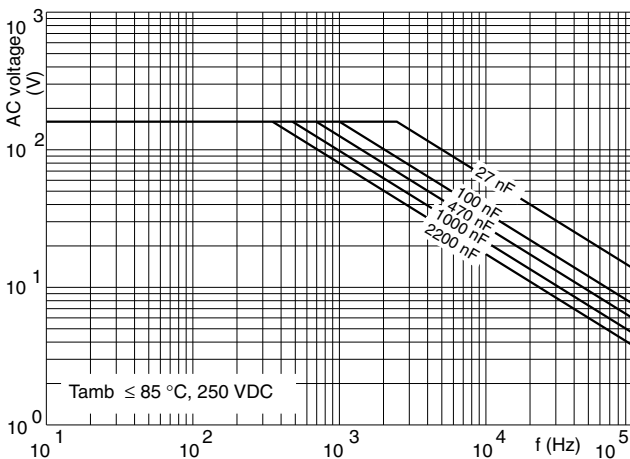
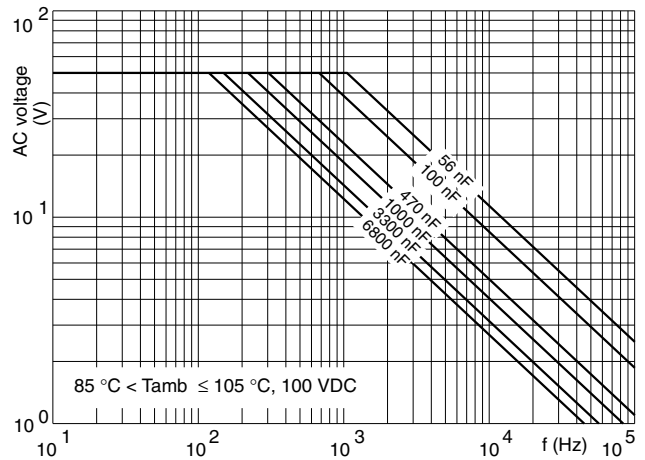
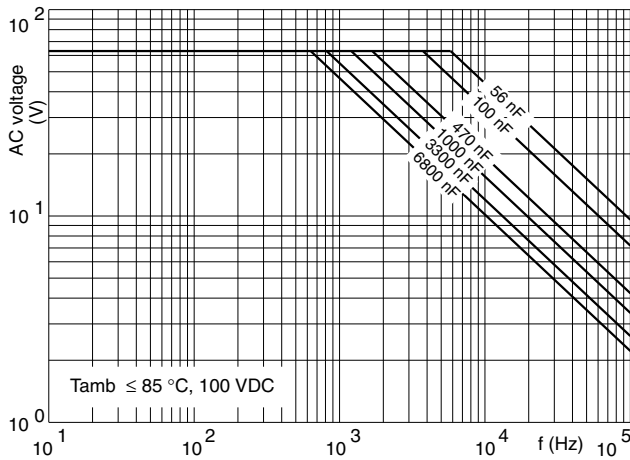
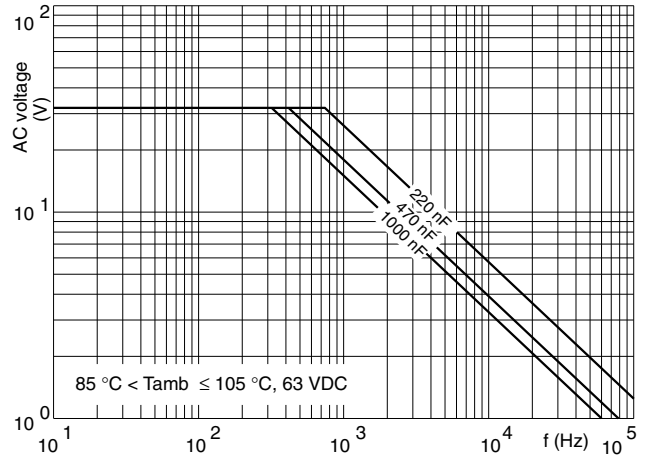
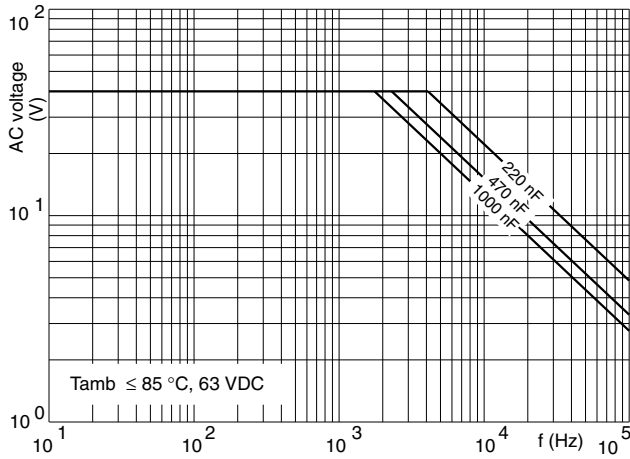


**IMPEDANCE**

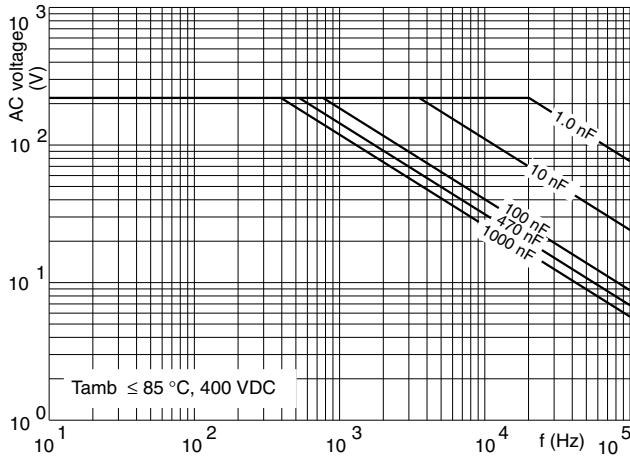




MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY









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