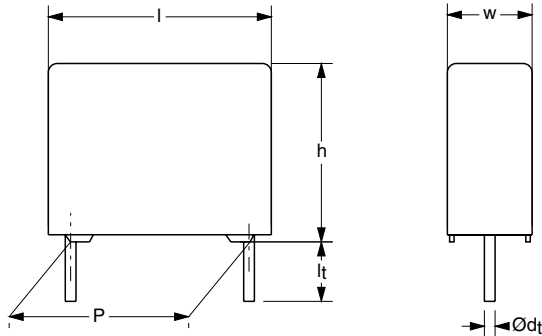


## Metallized Polyester Film Capacitors MKT Radial Potted Type



Dimensions in mm

### APPLICATIONS

Blocking and coupling. Bypass and energy reservoir

### MARKING

C-value; tolerance; rated voltage; code for manufacturer; year and week of manufacturer; manufacturer's type designation

### DIELECTRIC

Polyester film

### ELECTRODES

Vacuum deposited aluminum

### ENCAPSULATION

Flame retardant plastic case and epoxy resin (UL-class 94 V-0)

### CONSTRUCTION

Wound mono construction

### LEADS

Tinned wire

### CAPACITANCE RANGE (E12 SERIES)

0.0047 to 0.68  $\mu$ F

### FEATURES

Available taped and loose in box  
Lead (Pb)-free product  
RoHS-compliant product



**RoHS**  
COMPLIANT

### CAPACITANCE TOLERANCE

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

### RATED (DC) VOLTAGE

100 V; 250 V; 400 V; 630 V

### RATED (AC) VOLTAGE

63 V; 160 V; 220 V; 250 V

### CLIMATIC CATEGORY

55/105/56

### RATED TEMPERATURE

85 °C

### MAXIMUM APPLICATION TEMPERATURE

100 °C

### REFERENCE SPECIFICATIONS

IEC 60384-2

### PERFORMANCE GRADE

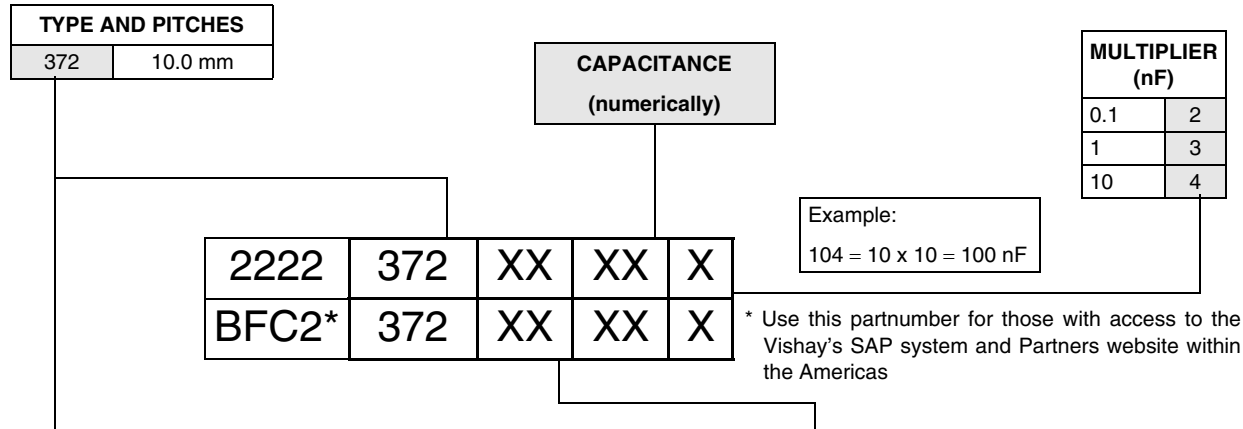
Grade 1 (long life)

### DETAIL SPECIFICATION

For more detailed data and test requirements contact:  
[filmcaps.roeselare@vishay.com](mailto:filmcaps.roeselare@vishay.com)



**COMPOSITION OF CATALOG NUMBER**



| TYPE  | PACKAGING     | LEAD CONFIGURATION  | PREFERRED TYPES |       |       |       |       |
|-------|---------------|---|-----------------|-------|-------|-------|-------|
|       |               |   | C-TOL           | 100 V | 250 V | 400 V | 630 V |
| 372   | loose in box  | lead length 4.0 + 1.0/- 0.5 mm                              | ± 10 %          | 21    | 41    | 51    | 61    |
|       |               |   | ON REQUEST      |       |       |       |       |
| 372   | loose in box  | lead length 4.0 + 1.0/- 0.5 mm                              | ± 5 %           | 22    | 42    | 52    | 62    |
|       | taped on reel | H = 18.5 mm; P <sub>0</sub> = 12.7 mm; reel diameter 356 mm | ± 10 %          | 25    | 45    | 55    | 65    |
|       |               |   | ± 5 %           | 26    | 46    | 56    | 66    |
|       | ammopack      | H = 18.5 mm; P <sub>0</sub> = 12.7 mm                       | ± 10 %          | 28    | 48    | 58    | 68    |
| ± 5 % |               |   | 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 × 10 <sup>-4</sup> | ≤ 130 × 10 <sup>-4</sup> | ≤ 250 × 10 <sup>-4</sup> |                  |
| 0.1 μF < C ≤ 0.68 μF   | ≤ 75 × 10 <sup>-4</sup> | ≤ 130 × 10 <sup>-4</sup> | ≤ 300 × 10 <sup>-4</sup> |                  |
| Rated voltage pulse slope (dU/dt) <sub>R</sub>                       | at 100 V (DC)           | at 250 V (DC)            | at 400 V (DC)            | at 630 V (DC)    |
|  | 34 V/μs                 | 50 V/μs                  | 80 V/μs                  | 120 V/μs         |
| R between leads, for C ≤ 0.33 μF:                                    |                         |                          |                          |                  |
| 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 100 V; 1 minute                 | > 5000 s                |                          |                          |                  |
| R between interconnected leads and case (foil method)                | > 30000 MΩ              | > 30000 MΩ               | > 30000 MΩ               | > 30000 MΩ       |
| Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s | 160 V; 1 minute         | 400 V; 1 minute          | 640 V; 1 minute          | 1008 V; 1 minute |
| Withstanding (DC) voltage between leads and case                     | 200 V; 1 minute         | 500 V; 1 minute          | 800 V; 1 minute          | 1260 V; 1 minute |



Metallized Polyester Film Capacitors Vishay BCcomponents  
MKT Radial Potted Type

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

| C<br>( $\mu\text{F}$ )                                       | DIMENSIONS<br>W × H × L<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 372 ..... AND PACKAGING |      |      |          |
|--|---------------------------------|-------------|---|------|------|----------|
|  |                                 |             | LOOSE IN BOX                                |      | REEL | AMMOPACK |
|  |                                 |             | It = 4.0 + 1.0/- 0.5 mm                     |      |      |          |
|  |                                 |             | C-tol = ± 10 %                              | SPQ  |      |          |
| last 5 digits of catalog number                              | SPQ                             | SPQ         | SPQ   |      |      |          |
| <b>Pitch = 10.0 ± 0.4 mm; d<sub>t</sub> = 0.60 ± 0.06 mm</b> |                                 |             |   |      |      |          |
| 0.1<br>0.12<br>0.15<br>0.18                                  | 4.0 × 10.0 × 12.5               | 0.7         | 21104<br>21124<br>21154<br>21184            | 1000 | 1400 | 750      |
| 0.22<br>0.27<br>0.33   | 4.0 × 10.0 × 12.5               | 0.7         | 21224<br>21274<br>21334                     | 1000 | 1400 | 750      |
| 0.39<br>0.47   | 5.0 × 11.0 × 12.5               | 0.9         | 21394<br>21474                              | 1000 | 1100 | 600      |
| 0.56<br>0.68   | 6.0 × 12.0 × 12.5               | 1.0         | 21564<br>21684                              | 750  | 900  | 500      |

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

| C<br>( $\mu\text{F}$ )                                       | DIMENSIONS<br>W × H × L<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 372 ..... AND PACKAGING |      |      |          |
|--|---------------------------------|-------------|---|------|------|----------|
|  |                                 |             | LOOSE IN BOX                                |      | REEL | AMMOPACK |
|  |                                 |             | It = 4.0 + 1.0/- 0.5 mm                     |      |      |          |
|  |                                 |             | C-tol = ± 10 %                              | SPQ  |      |          |
| last 5 digits of catalog number                              | SPQ                             | SPQ         | SPQ   |      |      |          |
| <b>Pitch = 10.0 ± 0.4 mm; d<sub>t</sub> = 0.60 ± 0.06 mm</b> |                                 |             |   |      |      |          |
| 0.047<br>0.056<br>0.068<br>0.082<br>0.1                      | 4.0 × 10.0 × 12.5               | 0.7         | 41473<br>41563<br>41683<br>41823<br>41104   | 1000 | 1400 | 750      |
| 0.12<br>0.15   | 5.0 × 11.0 × 12.5               | 0.9         | 41124<br>41154                              | 1000 | 1100 | 600      |
| 0.18<br>0.22   | 6.0 × 12.0 × 12.5               | 1.0         | 41184<br>41224                              | 750  | 900  | 500      |

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

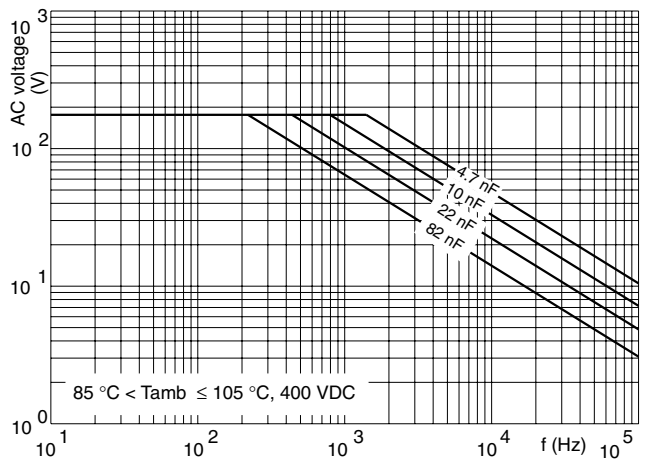
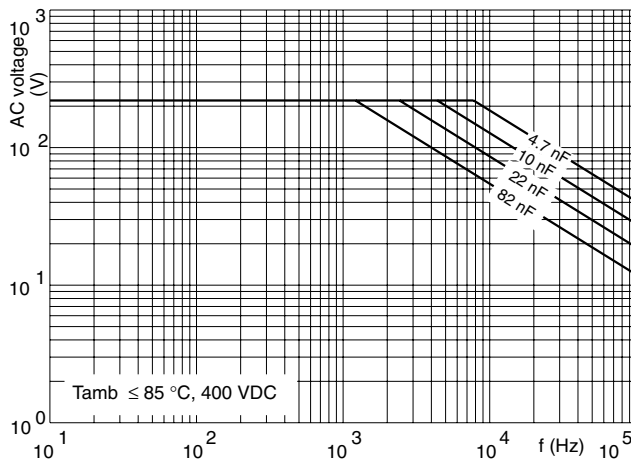
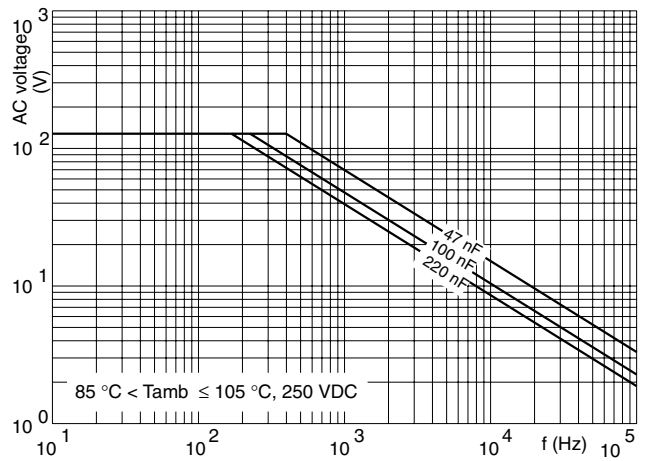
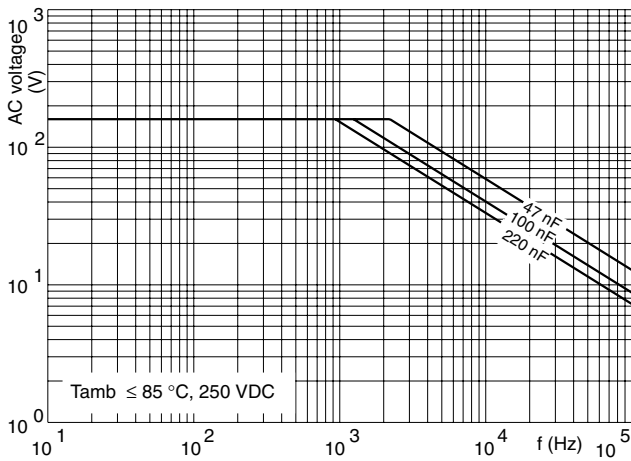
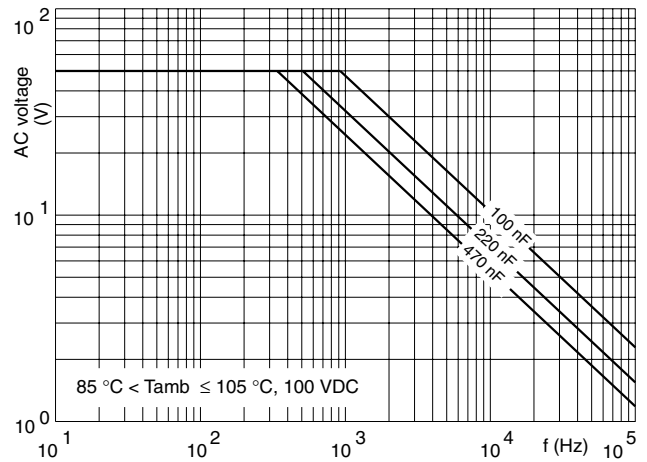
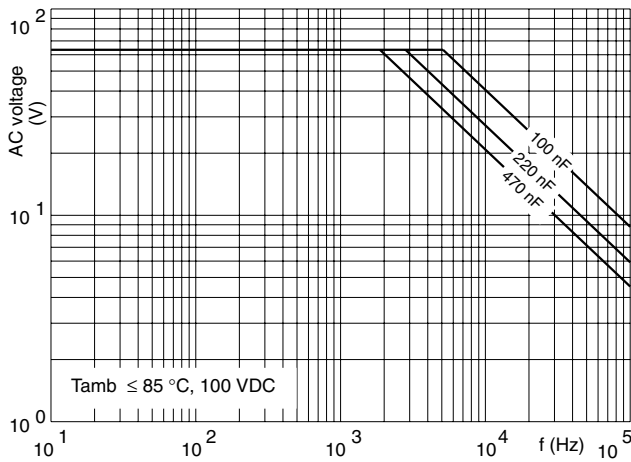
| C<br>( $\mu\text{F}$ )   | DIMENSIONS<br>W × H × L<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 372 ..... AND PACKAGING |                                 |      |          |     |
|--|---------------------------------|-------------|---|---------------------------------|------|----------|-----|
|  |                                 |             | LOOSE IN BOX                                |                                 | REEL | AMMOPACK |     |
|  |                                 |             | It = 4.0 + 1.0/- 0.5 mm                     |                                 | SPQ  | SPQ      | SPQ |
|  |                                 |             | C-tol = $\pm 10\%$                          | 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> |                                 |             |   |                                 |      |          |     |
| 0.0047   | 4.0 × 10.0 × 12.5               | 0.7         | 51472                                       | 1000                            | 1400 | 750      |     |
| 0.0056   |                                 |             | 51562                                       |                                 |      |          |     |
| 0.0068   |                                 |             | 51682                                       |                                 |      |          |     |
| 0.0082   |                                 |             | 51822                                       |                                 |      |          |     |
| 0.01   |                                 |             | 51103                                       |                                 |      |          |     |
| 0.012  |                                 |             | 51123                                       |                                 |      |          |     |
| 0.015  |                                 |             | 51153                                       |                                 |      |          |     |
| 0.018  |                                 |             | 51183                                       |                                 |      |          |     |
| 0.022  |                                 |             | 51223                                       |                                 |      |          |     |
| 0.027  |                                 |             | 51273                                       |                                 |      |          |     |
| 0.033  | 51333                           |             |   |                                 |      |          |     |
| 0.039  | 5.0 × 11.0 × 12.5               | 0.9         | 51393                                       | 1000                            | 1100 | 600      |     |
| 0.047  |                                 |             | 51473                                       |                                 |      |          |     |
| 0.056  |                                 |             | 51563                                       |                                 |      |          |     |
| 0.068  | 6.0 × 12.0 × 12.5               | 1.0         | 51683                                       | 750                             | 900  | 500      |     |
| 0.082  |                                 |             | 51823                                       |                                 |      |          |     |

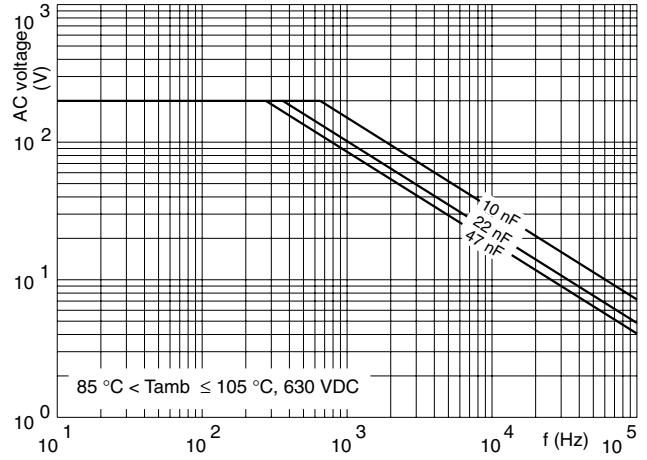
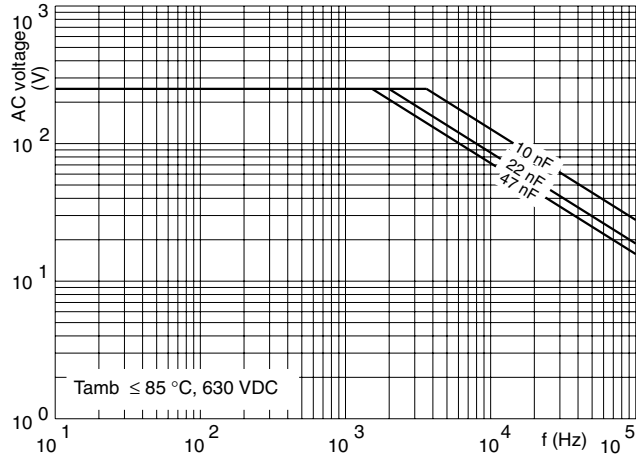
$U_{Rdc} = 630\text{ V}$ ;  $U_{Rac} = 250\text{ V}$

| C<br>( $\mu\text{F}$ )   | DIMENSIONS<br>W × H × L<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 372 ..... AND PACKAGING |                                 |      |          |     |
|--|---------------------------------|-------------|---|---------------------------------|------|----------|-----|
|  |                                 |             | LOOSE IN BOX                                |                                 | REEL | AMMOPACK |     |
|  |                                 |             | It = 4.0 + 1.0/- 0.5 mm                     |                                 | SPQ  | SPQ      | SPQ |
|  |                                 |             | C-tol = $\pm 10\%$                          | 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> |                                 |             |   |                                 |      |          |     |
| 0.01   | 4.0 × 10.0 × 12.5               | 0.6         | 61103                                       | 1000                            | 1400 | 750      |     |
| 0.012  |                                 |             | 61123                                       |                                 |      |          |     |
| 0.015  |                                 |             | 61153                                       |                                 |      |          |     |
| 0.018  |                                 |             | 61183                                       |                                 |      |          |     |
| 0.022  |                                 |             | 61223                                       |                                 |      |          |     |
| 0.027  | 5.0 × 11.0 × 12.5               | 0.9         | 61273                                       | 1000                            | 1100 | 600      |     |
| 0.033  |                                 |             | 61333                                       |                                 |      |          |     |
| 0.039  | 6.0 × 12.0 × 12.5               | 1.0         | 61393                                       | 750                             | 900  | 500      |     |
| 0.047  |                                 |             | 61473                                       |                                 |      |          |     |

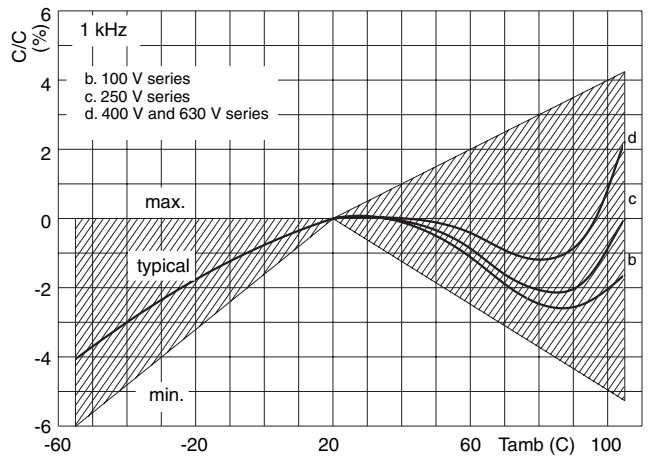
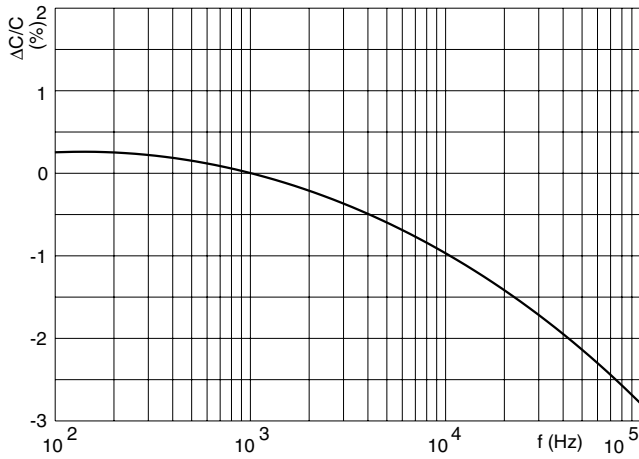


MAXIMUM RMS VOLTAGE (SENEWAVE) AS A FUNCTION OF FREQUENCY

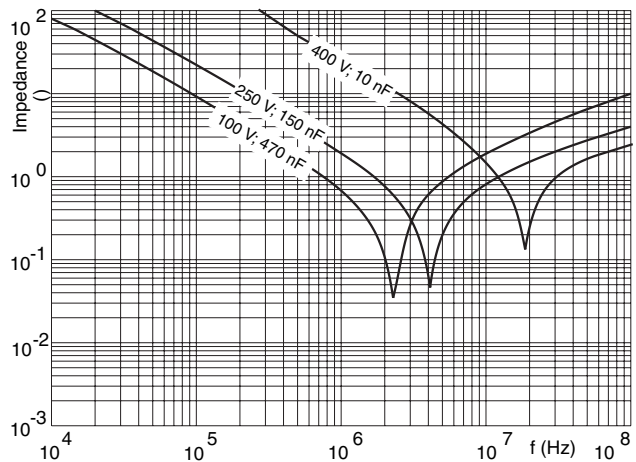




**CAPACITANCE**



**IMPEDANCE**





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