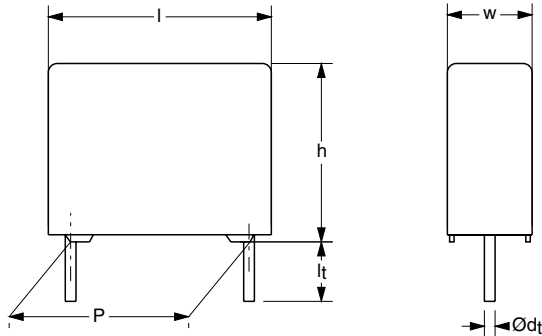


## Metallized Polyester Film Capacitors MKT Radial Potted Type



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

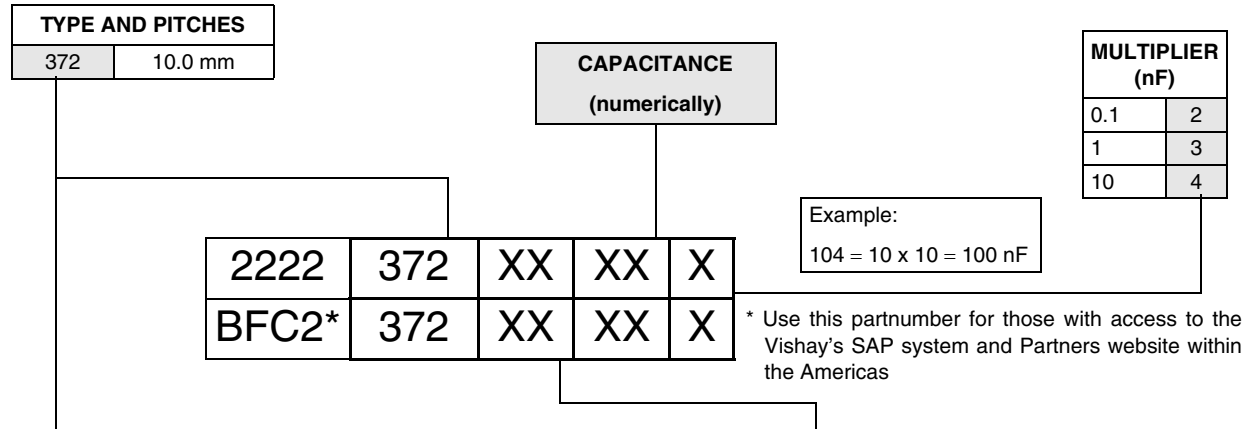
Grade 1 (long life)

### 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;<br>reel diameter 356 mm | ± 10 %          | 25    | 45    | 55    | 65    |
|          |                                       |  | ± 5 %           | 26    | 46    | 56    | 66    |
|          |                                       |  | ± 10 %          | 28    | 48    | 58    | 68    |
| ammopack | H = 18.5 mm; P <sub>0</sub> = 12.7 mm | ± 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);<br>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      |

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

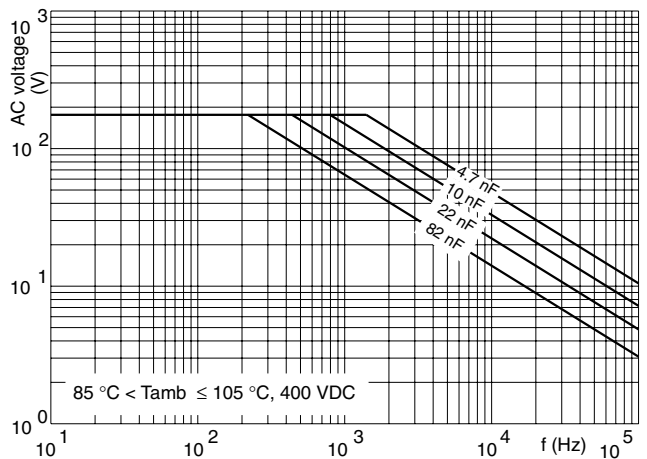
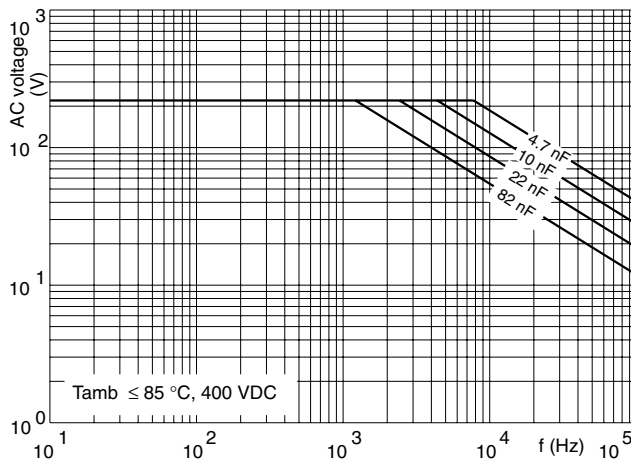
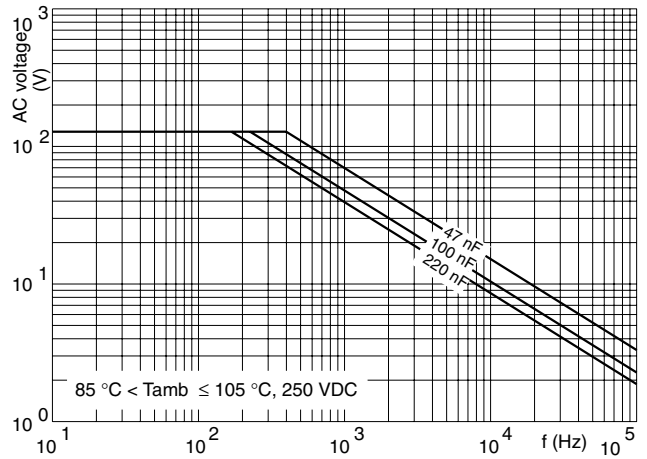
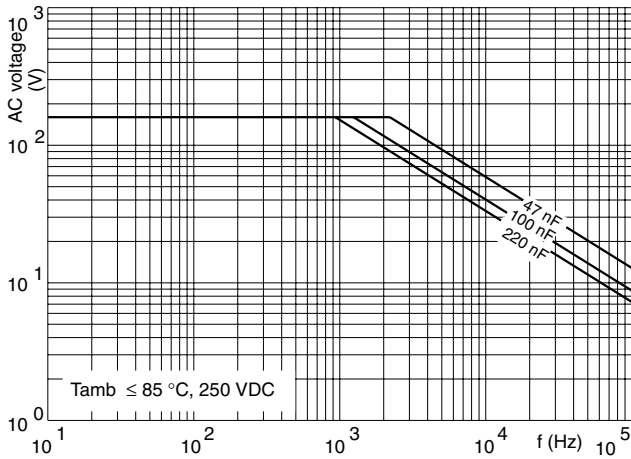
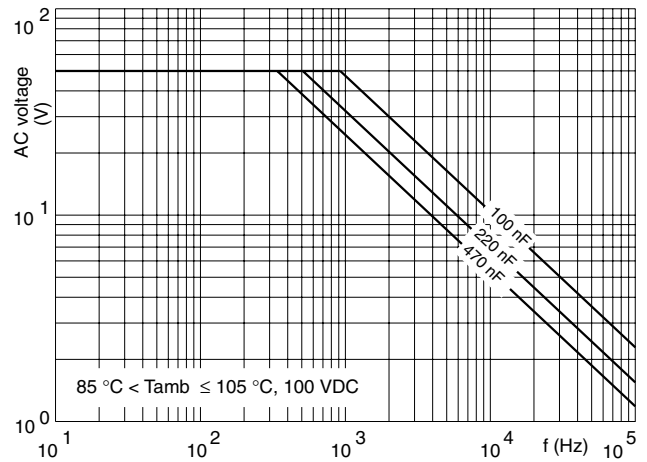
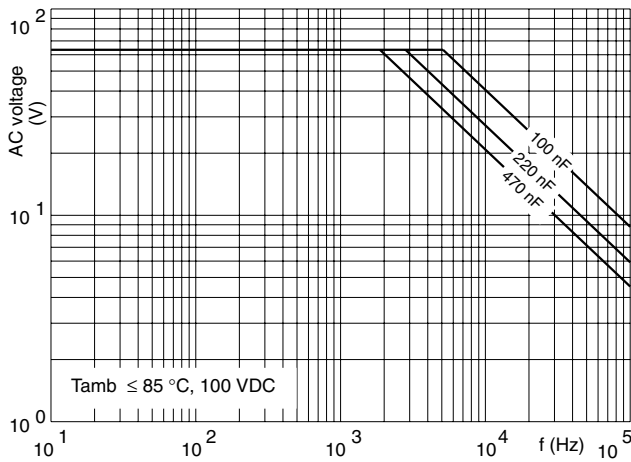
| C<br>( $\mu\text{F}$ )                                       | DIMENSIONS<br>W × H × L<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 372 ..... AND PACKAGING       |      |      |          |     |
|--|---------------------------------|-------------|---|------|------|----------|-----|
|  |                                 |             | LOOSE IN BOX                                      |      | REEL | AMMOPACK |     |
|  |                                 |             | It = 4.0 + 1.0/- 0.5 mm                           |      | SPQ  | SPQ      | SPQ |
|  |                                 |             | C-tol = ± 10 %<br>last 5 digits of catalog number |      |      |          |     |
| <b>Pitch = 10.0 ± 0.4 mm; d<sub>t</sub> = 0.60 ± 0.06 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   |      |      |          |     |

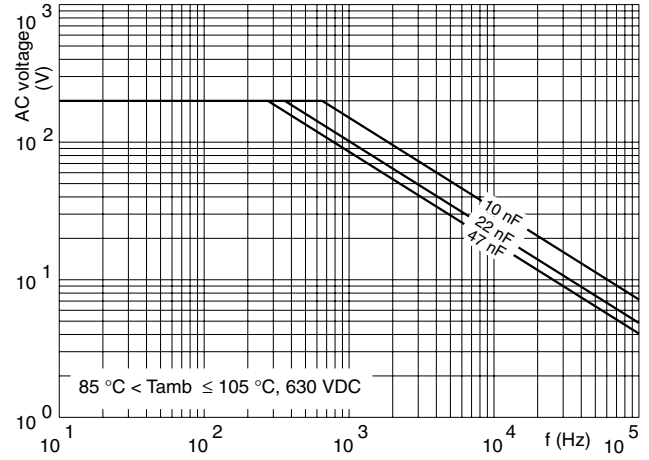
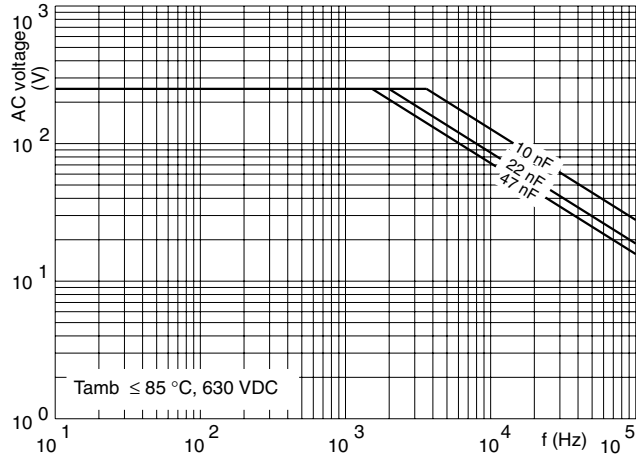
$U_{Rdc} = 630\text{ V}$ ;  $U_{Rac} = 250\text{ V}$

| 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 = ± 10 %<br>last 5 digits of catalog number |      |      |          |     |
| <b>Pitch = 10.0 ± 0.4 mm; d<sub>t</sub> = 0.60 ± 0.06 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   |      |      |          |     |

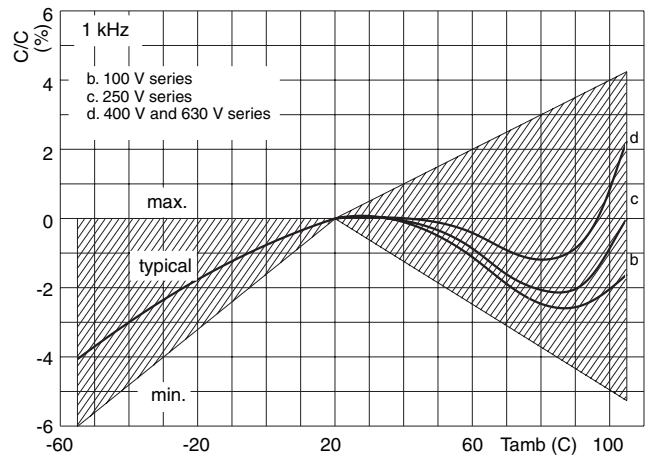
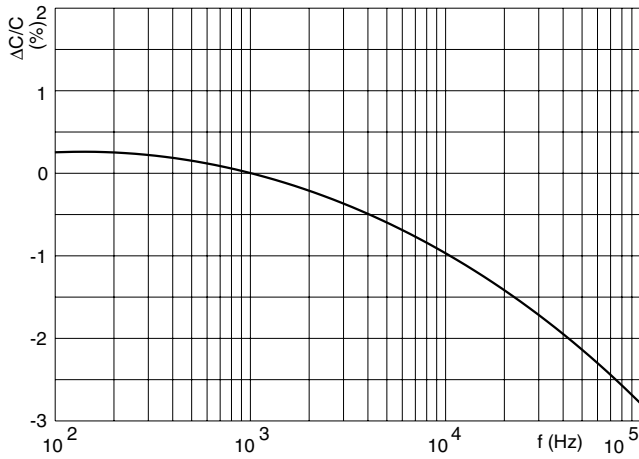


MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY

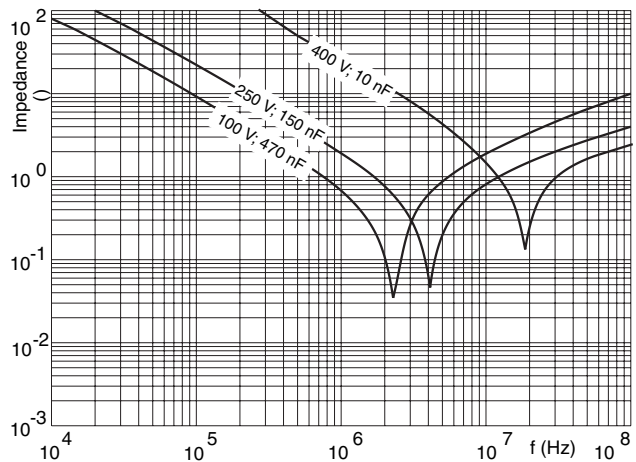




**CAPACITANCE**



**IMPEDANCE**





## Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.