

## Metallized Polyester Film Capacitors MKT Radial Potted Type

**APPLICATIONS**

Blocking and coupling. Bypass and energy reservoir

**MARKING**

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

**DIELECTRIC**

Polyester film

**ELECTRODES**

Vacuum deposited aluminium

**ENCAPSULATION**

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

**CONSTRUCTION**

Wound mono construction

**LEADS**

Tinned wire

**CAPACITANCE RANGE (E12 SERIES)**

0.001 to 1.5  $\mu$ F

**CAPACITANCE TOLERANCE**

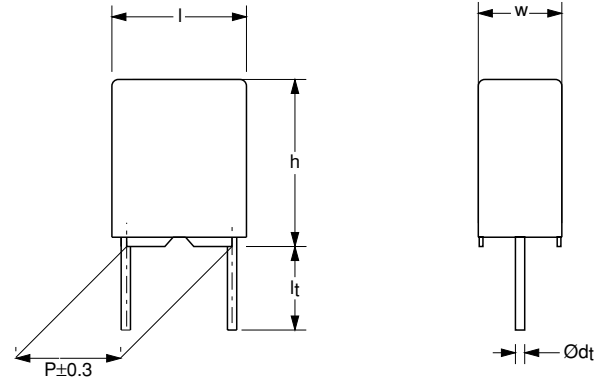
$\pm 10\%$ ;  $\pm 5\%$

**RATED (DC) VOLTAGE:**

63 V; 100 V; 250 V; 400 V

**RATED (AC) VOLTAGE**

40 V; 63 V; 160 V; 220 V



Dimensions in mm

**CLIMATIC CATEGORY**

55/105/56

**RATED TEMPERATURE**

85 °C

**MAXIMUM APPLICATION TEMPERATURE**

105 °C

**REFERENCE SPECIFICATIONS**

IEC 60384-2

**PERFORMANCE GRADE**

Grade 1 (long life)

**FEATURES**

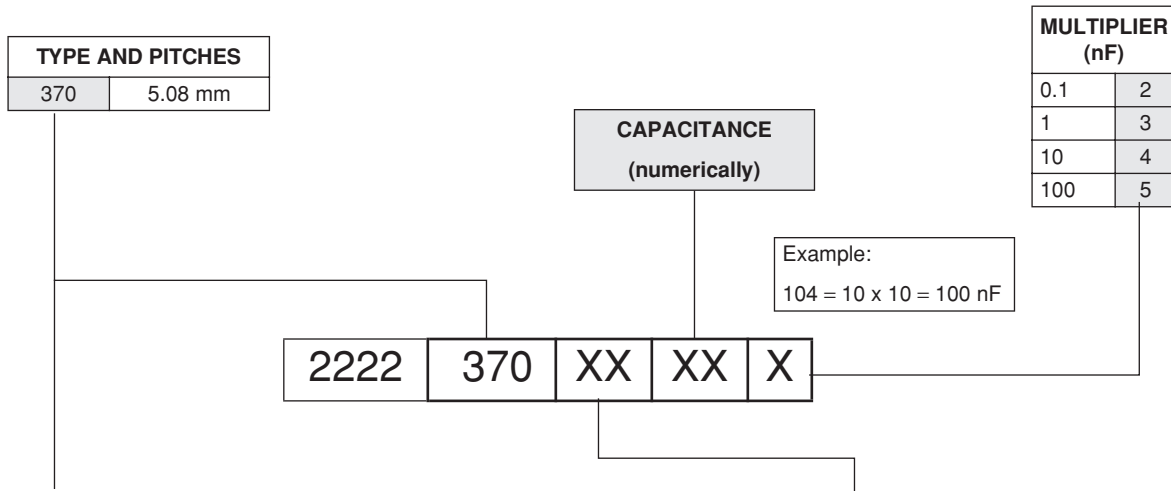
Available taped and loose in box

**DETAIL SPECIFICATION**

For more detailed data and test requirements see "Type  
detail specification HQN-384-02/103".



## COMPOSITION OF CATALOG NUMBER



| TYPE | PACKAGING     | LEAD CONFIGURATION   | PREFERRED TYPES |      |       |       |       |
|------|---------------|--|-----------------|------|-------|-------|-------|
|      |               |  | C-TOL           | 63 V | 100 V | 250 V | 400 V |
| 370  | ammopack      | H = 18.5 mm; P <sub>0</sub> = 12.7 mm                          | ±10%            | 75   | 85    | 35    | 65    |
|      |               |  | ±5%             | 76   | 86    | 36    | 66    |
|      |               |  | ON REQUEST      |      |       |       |       |
| 370  | loose in box  | lead length 4.0 +1.0/-0.5 mm                                   | ±10%            | 11   | 21    | 41    | 51    |
|      |               |  | ±5%             | 12   | 22    | 42    | 52    |
|      |               | lead length 26.0 ±2.0 mm                                       | ±10%            | 15   | 25    | 45    | 55    |
|      |               |  | ±5%             | 16   | 26    | 46    | 56    |
|      | taped on reel | H = 18.5 mm; P <sub>0</sub> = 12.7 mm;<br>reel diameter 356 mm | ±10%            | 18   | 28    | 48    | 58    |
|      |               |  | ±5%             | 19   | 29    | 49    | 59    |

## 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 ≤ 0.47 μF  | ≤75 × 10 <sup>-4</sup> | ≤130 × 10 <sup>-4</sup> | ≤300 × 10 <sup>-4</sup> |                 |
| 0.47 μF < C ≤ 1.5 μF  | ≤75 × 10 <sup>-4</sup> | ≤130 × 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)   |
|   | 60 V/μs                | 110 V/μs                | 330 V/μs                | 630 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       |
| RC between leads, for:  |                        |                         |                         |                 |
| 0.33 μF < C ≤ 1.0 μF at 10 V; 1 minute                                  | >5000 s                |                         |                         |                 |
| C > 1.0 μF at 10 V; 1 minute  | >1000 s                |                         |                         |                 |
| 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 | 100 V; 1 minute        | 160 V; 1 minute         | 400 V; 1 minute         | 640 V; 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 |



Metallized Polyester Film Capacitors  
MKT Radial Potted Type

Vishay BCcomponents

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

| C<br>( $\mu\text{F}$ )  | DIMENSIONS<br>$w \times h \times l$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 370 ..... AND PACKAGING |                   |      |              |            |      |
|---|---|-------------|---|-------------------|------|--------------|------------|------|
|   |   |             | AMMOPACK                                    |                   |      | LOOSE IN BOX |            | REEL |
|   |   |             | H = 18.5 mm; P <sub>0</sub> = 12.7 mm       |                   |      | short leads  | long leads |      |
|   |   |             | C-tol = $\pm 10\%$                          | C-tol = $\pm 5\%$ | SPQ  | SPQ          | SPQ        |      |
| last 5 digits of catalog number   |   | SPQ         | SPQ   | SPQ               |      |              |            |      |
| <b>Pitch = 5.08 <math>\pm</math> 0.30 mm; d<sub>t</sub> = 0.50 <math>\pm</math> 0.05 mm</b> |   |             |   |                   |      |              |            |      |
| 0.056   | 2.5 $\times$ 6.5 $\times$ 7.2               | 0.25        | 75563                                       | 76563             | 2000 | 2000         | 1000       | 2000 |
| 0.068   |   |             | 75683                                       | 76683             |      |              |            |      |
| 0.082   |   |             | 75823                                       | 76823             |      |              |            |      |
| 0.1   |   |             | 75104                                       | 76104             |      |              |            |      |
| 0.12  |   |             | 75124                                       | 76124             |      |              |            |      |
| 0.15  |   |             | 75154                                       | 76154             |      |              |            |      |
| 0.18  |   |             | 75184                                       | 76184             |      |              |            |      |
| 0.22  | 3.5 $\times$ 8.0 $\times$ 7.2               | 0.35        | 75224                                       | 76224             | 1500 | 2000         | 1000       | 1500 |
| 0.27  |   |             | 75274                                       | 76274             |      |              |            |      |
| 0.33  |   |             | 75334                                       | 76334             |      |              |            |      |
| 0.39  |   |             | 75394                                       | 76394             |      |              |            |      |
| 0.47  |   |             | 75474                                       | 76474             |      |              |            |      |
| 0.56  | 4.5 $\times$ 9.0 $\times$ 7.2               | 0.45        | 75564                                       | 76564             | 1000 | 2000         | 1000       | 1000 |
| 0.68  |   |             | 75684                                       | 76684             |      |              |            |      |
| 0.82  | 6.0 $\times$ 11.0 $\times$ 7.2              | 0.60        | 75824                                       | 76824             | 750  | 2000         | 1000       | 1000 |
| 1   |   |             | 75105                                       | 76105             |      |              |            |      |
| 1.2 <sup>(1)</sup>  |   |             | 75125                                       | 76125             |      |              |            |      |
| 1.5 <sup>(1)</sup>  |   |             | 75155                                       | 76155             |      |              |            |      |

**Note**

1. For C = 1.2  $\mu\text{F}$  and C = 1.5  $\mu\text{F}$ :  $U_{Rdc} = 50\text{ V}$  and  $U_{Rac} = 32\text{ V}$ .

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

| C<br>( $\mu\text{F}$ )  | DIMENSIONS<br>$w \times h \times l$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 370 ..... AND PACKAGING |                   |      |              |            |      |
|---|---|-------------|---|-------------------|------|--------------|------------|------|
|   |   |             | AMMOPACK                                    |                   |      | LOOSE IN BOX |            | REEL |
|   |   |             | H = 18.5 mm; P <sub>0</sub> = 12.7 mm       |                   |      | short leads  | long leads |      |
|   |   |             | C-tol = $\pm 10\%$                          | C-tol = $\pm 5\%$ | SPQ  | SPQ          | SPQ        |      |
| last 5 digits of catalog number   |   | SPQ         | SPQ   | SPQ               |      |              |            |      |
| <b>Pitch = 5.08 <math>\pm</math> 0.30 mm; d<sub>t</sub> = 0.50 <math>\pm</math> 0.05 mm</b> |   |             |   |                   |      |              |            |      |
| 0.012   | 2.5 $\times$ 6.5 $\times$ 7.2               | 0.25        | 85123                                       | 86123             | 2000 | 2000         | 1000       | 2000 |
| 0.015   |   |             | 85153                                       | 86153             |      |              |            |      |
| 0.018   |   |             | 85183                                       | 86183             |      |              |            |      |
| 0.022   |   |             | 85223                                       | 86223             |      |              |            |      |
| 0.027   |   |             | 85273                                       | 86273             |      |              |            |      |
| 0.033   | 2.5 $\times$ 6.5 $\times$ 7.2               | 0.25        | 85333                                       | 86333             | 2000 | 2000         | 1000       | 2000 |
| 0.039   |   |             | 85393                                       | 86393             |      |              |            |      |
| 0.047   |   |             | 85473                                       | 86473             |      |              |            |      |
| 0.056   |   |             | 85563                                       | 86563             |      |              |            |      |
| 0.068   |   |             | 85683                                       | 86683             |      |              |            |      |
| 0.082   |   |             | 85823                                       | 86823             |      |              |            |      |
| 0.1   | 3.5 $\times$ 8.0 $\times$ 7.2               | 0.35        | 85104                                       | 86104             | 1500 | 2000         | 1000       | 1500 |
| 0.12  |   |             | 85124                                       | 86124             |      |              |            |      |
| 0.15  |   |             | 85154                                       | 86154             |      |              |            |      |
| 0.18  |   |             | 85184                                       | 86184             |      |              |            |      |
| 0.22  | 4.5 $\times$ 9.0 $\times$ 7.2               | 0.45        | 85224                                       | 86224             | 1000 | 2000         | 1000       | 1000 |
| 0.27  |   |             | 85274                                       | 86274             |      |              |            |      |
| 0.33  |   |             | 85334                                       | 86334             |      |              |            |      |
| 0.39  | 6.0 $\times$ 11.0 $\times$ 7.2              | 0.65        | 85394                                       | 86394             | 750  | 2000         | 1000       | 1000 |
| 0.47  |   |             | 85474                                       | 86474             |      |              |            |      |



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

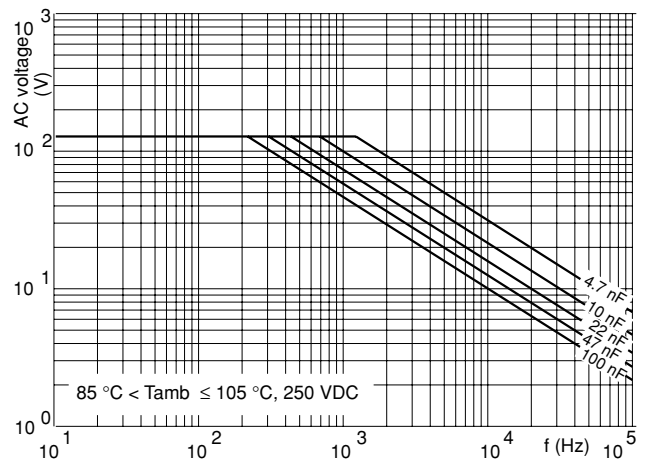
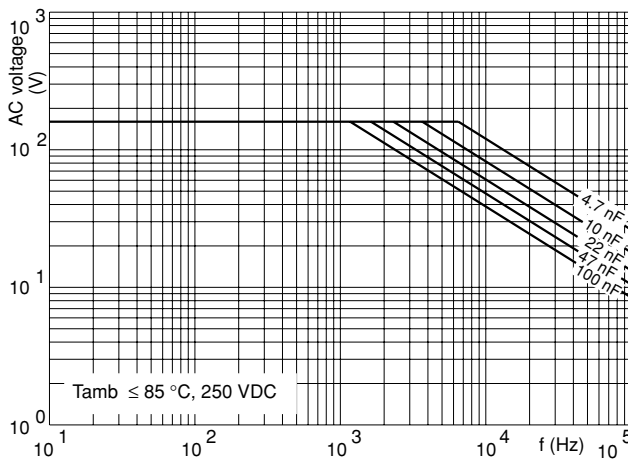
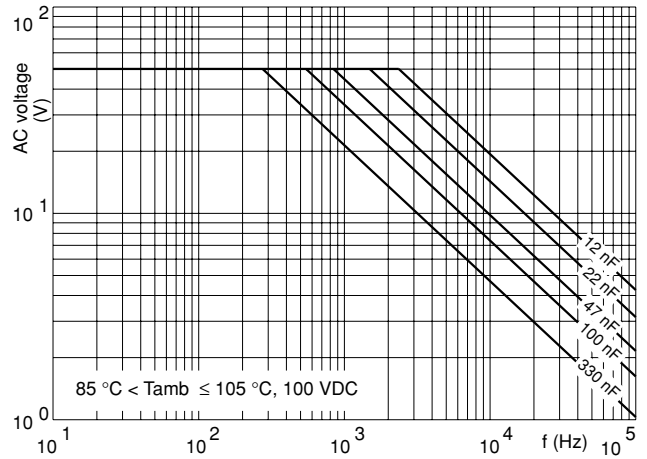
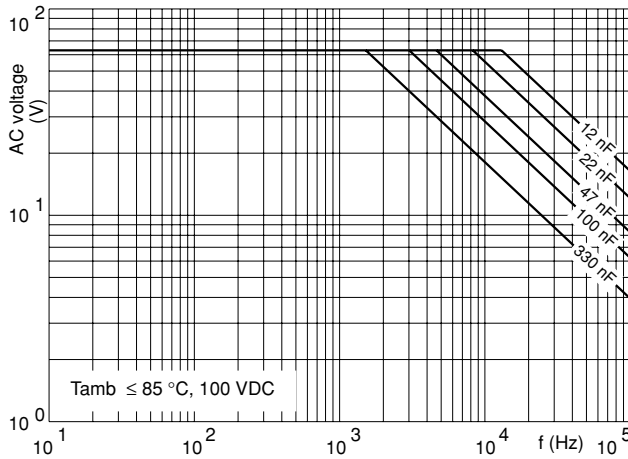
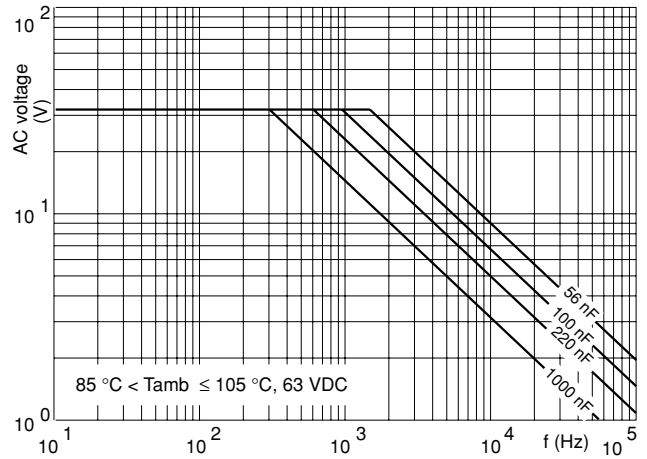
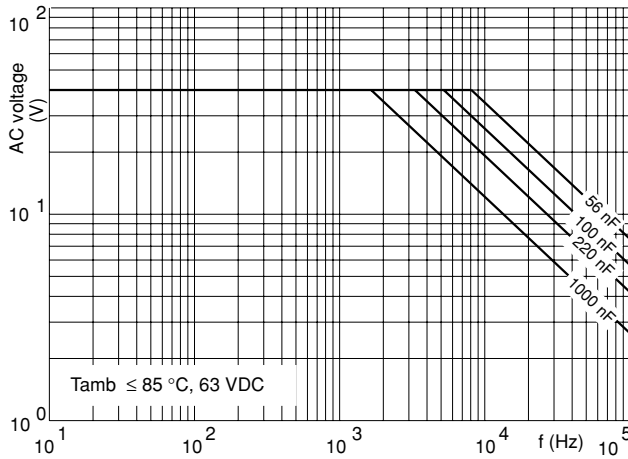
| C<br>( $\mu\text{F}$ )  | DIMENSIONS<br>$w \times h \times l$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 370 ..... AND PACKAGING |                   |      |              |           |      |
|---|---|-------------|---|-------------------|------|--------------|-----------|------|
|   |   |             | AMMOPACK                                    |                   |      | LOOSE IN BOX |           | REEL |
|   |   |             | H = 18.5 mm; P <sub>0</sub> = 12.7 mm       |                   |      | short leads  | longleads | SPQ  |
|   |   |             | C-tol = $\pm 10\%$                          | C-tol = $\pm 5\%$ | SPQ  | SPQ          | SPQ       |      |
| last 5 digits of catalog number   |   | SPQ         | SPQ   | SPQ               |      |              |           | SPQ  |
| <b>Pitch = 5.08 <math>\pm</math> 0.30 mm; d<sub>t</sub> = 0.50 <math>\pm</math> 0.05 mm</b> |   |             |   |                   |      |              |           |      |
| 0.0039  | 2.5 $\times$ 6.5 $\times$ 7.2               | 0.25        | 35392                                       | 36392             | 2000 | 2000         | 1000      | 2000 |
| 0.0047  |   |             | 35472                                       | 36472             |      |              |           |      |
| 0.0056  |   |             | 35562                                       | 36562             |      |              |           |      |
| 0.0068  |   |             | 35682                                       | 36682             |      |              |           |      |
| 0.0082  |   |             | 35822                                       | 36822             |      |              |           |      |
| 0.01  |   |             | 35103                                       | 36103             |      |              |           |      |
| 0.012   |   |             | 35123                                       | 36123             |      |              |           |      |
| 0.015   |   |             | 35153                                       | 36153             |      |              |           |      |
| 0.018   | 35183                                       | 36183       |   |                   |      |              |           |      |
| 0.022   | 3.5 $\times$ 8.0 $\times$ 7.2               | 0.35        | 35223                                       | 36223             | 1500 | 2000         | 1000      | 1500 |
| 0.027   |   |             | 35273                                       | 36273             |      |              |           |      |
| 0.033   |   |             | 35333                                       | 36333             |      |              |           |      |
| 0.039   | 4.5 $\times$ 9.0 $\times$ 7.2               | 0.45        | 35393                                       | 36393             | 1000 | 2000         | 1000      | 1000 |
| 0.047   |   |             | 35473                                       | 36473             |      |              |           |      |
| 0.056   |   |             | 35563                                       | 36563             |      |              |           |      |
| 0.068   | 6.0 $\times$ 11.0 $\times$ 7.2              | 0.60        | 35683                                       | 36683             | 750  | 2000         | 1000      | 1000 |
| 0.082   |   |             | 35823                                       | 36823             |      |              |           |      |
| 0.1   |   |             | 35104                                       | 36104             |      |              |           |      |

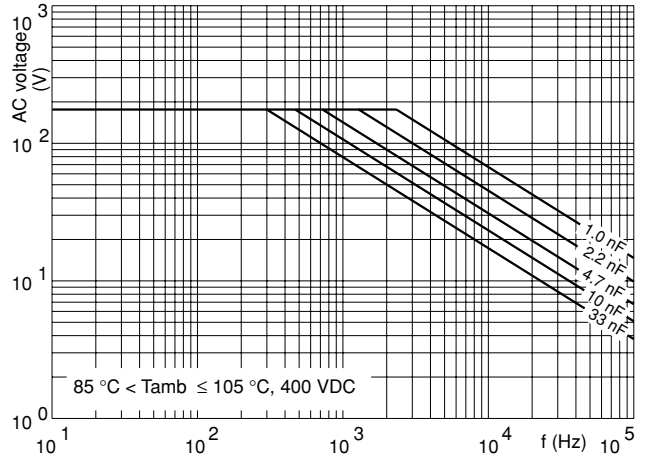
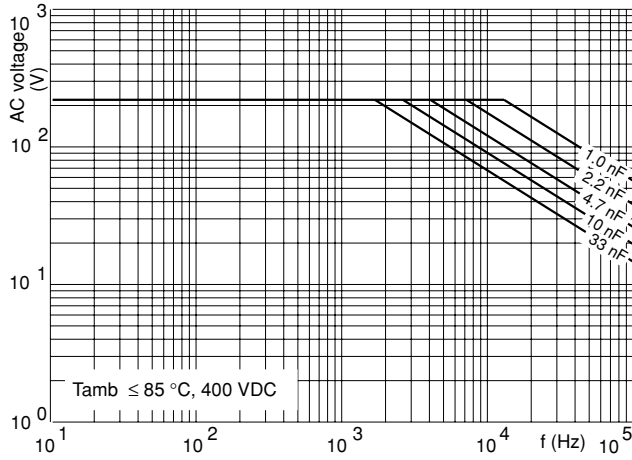
$U_{Rdc} = 400\text{ V}$ ;  $U_{Rac} = 220\text{ V}$

| C<br>( $\mu\text{F}$ )  | DIMENSIONS<br>$w \times h \times l$<br>(mm) | MASS<br>(g) | CATALOG NUMBER 2222 370 ..... AND PACKAGING |                   |      |              |            |      |
|---|---|-------------|---|-------------------|------|--------------|------------|------|
|   |   |             | AMMOPACK                                    |                   |      | LOOSE IN BOX |            | REEL |
|   |   |             | H = 18.5 mm; P <sub>0</sub> = 12.7 mm       |                   |      | short leads  | long leads | SPQ  |
|   |   |             | C-tol = $\pm 10\%$                          | C-tol = $\pm 5\%$ | SPQ  | SPQ          | SPQ        |      |
| last 5 digits of catalog number   |   | SPQ         | SPQ   | SPQ               |      |              |            | SPQ  |
| <b>Pitch = 5.08 <math>\pm</math> 0.30 mm; d<sub>t</sub> = 0.50 <math>\pm</math> 0.05 mm</b> |   |             |   |                   |      |              |            |      |
| 0.001   | 2.5 $\times$ 6.5 $\times$ 7.2               | 0.25        | 65102                                       | 66102             | 2000 | 2000         | 1000       | 2000 |
| 0.0012  |   |             | 65122                                       | 66122             |      |              |            |      |
| 0.0015  |   |             | 65152                                       | 66152             |      |              |            |      |
| 0.0018  |   |             | 65182                                       | 66182             |      |              |            |      |
| 0.0022  |   |             | 65222                                       | 66222             |      |              |            |      |
| 0.0027  |   |             | 65272                                       | 66272             |      |              |            |      |
| 0.0033  |   |             | 65332                                       | 66332             |      |              |            |      |
| 0.0039  |   |             | 65392                                       | 66392             |      |              |            |      |
| 0.0047  |   |             | 65472                                       | 66472             |      |              |            |      |
| 0.0056  |   |             | 65562                                       | 66562             |      |              |            |      |
| 0.0068  |   |             | 65682                                       | 66682             |      |              |            |      |
| 0.0082  |   |             | 65822                                       | 66822             |      |              |            |      |
| 0.01  |   |             | 3.5 $\times$ 8.0 $\times$ 7.2               | 0.35              |      |              |            |      |
| 0.012   | 65123                                       | 66123       |   |                   |      |              |            |      |
| 0.015   | 65153                                       | 66153       |   |                   |      |              |            |      |
| 0.018   | 4.5 $\times$ 9.0 $\times$ 7.2               | 0.45        | 65183                                       | 66183             | 1000 | 2000         | 1000       | 1000 |
| 0.022   |   |             | 65223                                       | 66223             |      |              |            |      |
| 0.027   |   |             | 65273                                       | 66273             |      |              |            |      |
| 0.033   | 6.0 $\times$ 11.0 $\times$ 7.2              | 0.60        | 65333                                       | 66333             | 750  | 2000         | 1000       | 1000 |
| 0.039   |   |             | 65393                                       | 66393             |      |              |            |      |
| 0.047   |   |             | 65473                                       | 66473             |      |              |            |      |

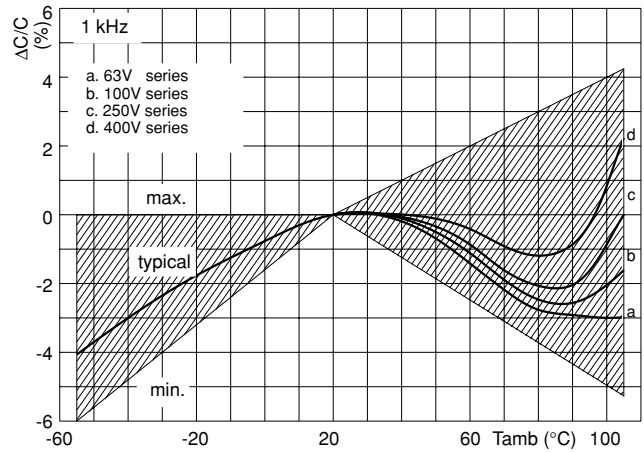
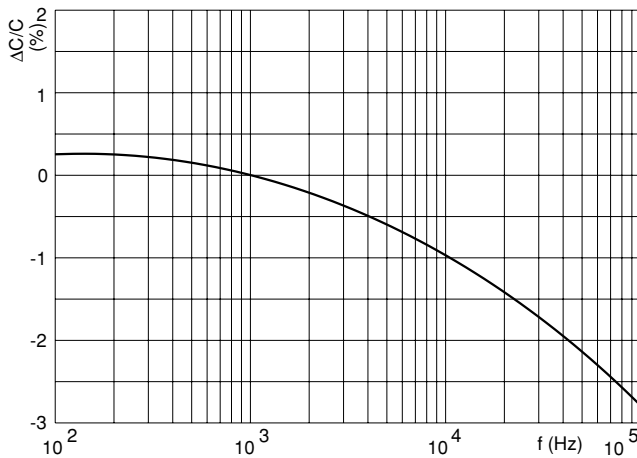


MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY





## CAPACITANCE



## IMPEDANCE

