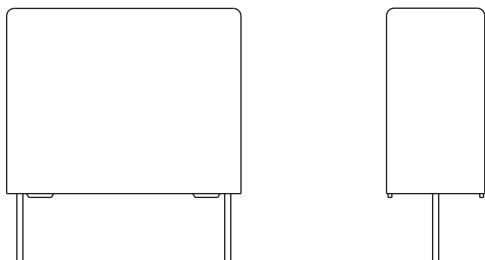




AC and Pulse Metallized Polypropylene Film Capacitors MKP Radial Potted Type



FEATURES

- Low loss dielectric
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

Low losses due to low contact resistance and low loss dielectric make these products suitable for applications where high currents at high frequency occur or high stability is preferred. Their small dimensions make them ideal for circuits with high packaging density.

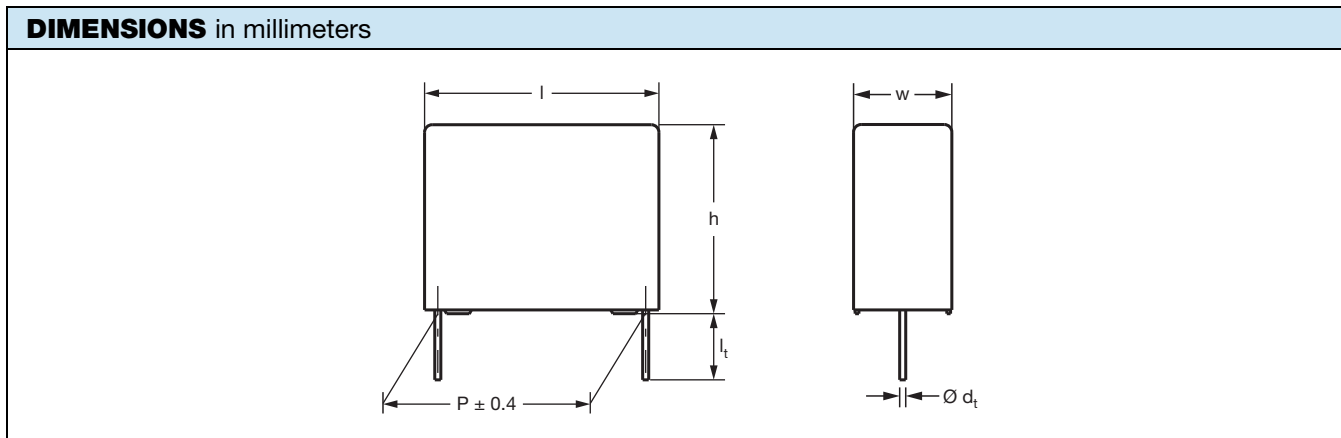


RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

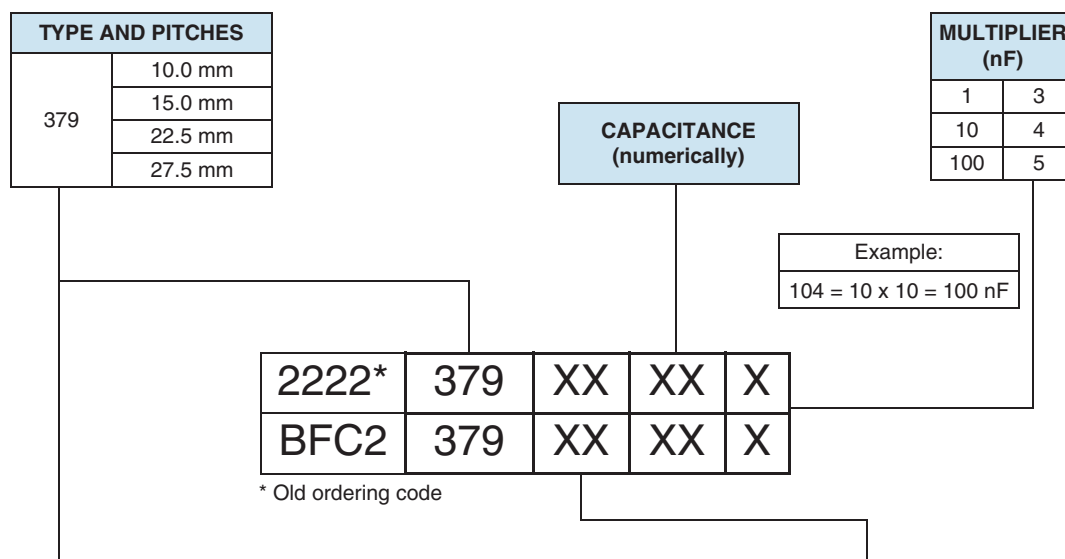
| QUICK REFERENCE DATA | |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Capacitance range (E24 series) | 0.01 μ F to 6.2 μ F |
| Capacitance tolerance | \pm 5 % |
| Climatic category | 55/085/56 |
| Maximum application temperature | 85 °C |
| Reference specifications | IEC 60384-17 |
| Dielectric | Polypropylene film |
| Electrodes | Metallized film |
| Construction | Wound mono construction |
| Encapsulation | Flame retardant plastic case and epoxy resin (UL-class 94 V-0) |
| Leads | Tinned wire |
| Marking | C-value; tolerance; rated voltage; manufacturer's type designation; code for dielectric material; manufacturer's emblem; code for factory of origin; year and week of manufacture |
| Rated DC voltage | 160 V _{DC} ; 250 V _{DC} ; 400 V _{DC} ; 630 V _{DC} |
| Rated AC voltage | 100 V _{AC} ; 160 V _{AC} ; 200 V _{AC} ; 220 V _{AC} |
| Rated peak-to-peak voltage | 280 V; 450 V; 560 V; 620 V |
| Rated temperature | 85 °C |
| Performance grade | Grade 1 (long life) |
| Stability grade | 160 V versions: grade 2 250 V to 630 V versions; pitch 5 mm to 15 mm: grade 2 250 V to 630 V versions; pitch 22.5 mm and 27.5 mm: grade 1 |

Note

- For more detailed data and test requirements contact dc-film@vishay.com



COMPOSITION OF CATALOG NUMBER



| TYPE | PACKAGING | LEAD CONFIGURATION | PREFERRED TYPES | | | | |
|------|---------------|-------------------------------------------------------------|-----------------|-------|-------|-------|-------|
| | | | C-TOL. | 160 V | 250 V | 400 V | 630 V |
| 379 | Loose in box | Lead length 4.0 mm + 1 mm / - 0.5 mm or 3.5 mm ± 0.3 mm | ± 5 % | 34 | 44 | 54 | 64 |
| TYPE | PACKAGING | LEAD CONFIGURATION | ON REQUEST | | | | |
| 379 | Taped on reel | H = 18.5 mm; P ₀ = 12.7 mm; reel diameter 500 mm | ± 5 % | 35 | 45 | 55 | 65 |



| SPECIFIC REFERENCE DATA - 160 V _{DC} | | |
|-----------------------------------------------------------------------------------------|--------------------------|---------------------------|
| DESCRIPTION | VALUE | |
| | at 10 kHz | at 100 kHz |
| Tangent of loss angle: | | |
| $C \leq 0.075 \mu\text{F}$ | $\leq 10 \times 10^{-4}$ | $\leq 20 \times 10^{-4}$ |
| $0.075 \mu\text{F} < C \leq 0.11 \mu\text{F}$ | $\leq 10 \times 10^{-4}$ | $\leq 25 \times 10^{-4}$ |
| $0.11 \mu\text{F} < C \leq 0.16 \mu\text{F}$ | $\leq 10 \times 10^{-4}$ | $\leq 30 \times 10^{-4}$ |
| $0.16 \mu\text{F} < C \leq 0.22 \mu\text{F}$ | $\leq 10 \times 10^{-4}$ | $\leq 40 \times 10^{-4}$ |
| $0.22 \mu\text{F} < C \leq 0.30 \mu\text{F}$ | $\leq 10 \times 10^{-4}$ | $\leq 45 \times 10^{-4}$ |
| $0.30 \mu\text{F} < C \leq 0.39 \mu\text{F}$ | $\leq 10 \times 10^{-4}$ | $\leq 45 \times 10^{-4}$ |
| $0.39 \mu\text{F} < C \leq 0.56 \mu\text{F}$ | $\leq 10 \times 10^{-4}$ | $\leq 80 \times 10^{-4}$ |
| $0.56 \mu\text{F} < C \leq 0.68 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 80 \times 10^{-4}$ |
| $0.68 \mu\text{F} < C \leq 0.82 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 90 \times 10^{-4}$ |
| $0.82 \mu\text{F} < C \leq 0.91 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 90 \times 10^{-4}$ |
| $0.91 \mu\text{F} < C \leq 1.0 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 120 \times 10^{-4}$ |
| $1.0 \mu\text{F} < C \leq 1.2 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 125 \times 10^{-4}$ |
| $1.2 \mu\text{F} < C \leq 1.3 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 125 \times 10^{-4}$ |
| $1.3 \mu\text{F} < C \leq 1.5 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 135 \times 10^{-4}$ |
| $1.5 \mu\text{F} < C \leq 1.6 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 135 \times 10^{-4}$ |
| $1.6 \mu\text{F} < C \leq 1.8 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 135 \times 10^{-4}$ |
| $1.8 \mu\text{F} < C \leq 2.0 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 145 \times 10^{-4}$ |
| $2.0 \mu\text{F} < C \leq 2.2 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 145 \times 10^{-4}$ |
| $2.2 \mu\text{F} < C \leq 2.4 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 145 \times 10^{-4}$ |
| $2.4 \mu\text{F} < C \leq 2.7 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 155 \times 10^{-4}$ |
| $2.7 \mu\text{F} < C \leq 3.0 \mu\text{F}$ | $\leq 15 \times 10^{-4}$ | $\leq 155 \times 10^{-4}$ |
| $3.0 \mu\text{F} < C \leq 3.3 \mu\text{F}$ | $\leq 20 \times 10^{-4}$ | $\leq 160 \times 10^{-4}$ |
| $3.3 \mu\text{F} < C \leq 3.6 \mu\text{F}$ | $\leq 20 \times 10^{-4}$ | $\leq 160 \times 10^{-4}$ |
| $3.6 \mu\text{F} < C \leq 3.9 \mu\text{F}$ | $\leq 20 \times 10^{-4}$ | $\leq 160 \times 10^{-4}$ |
| $3.9 \mu\text{F} < C \leq 4.3 \mu\text{F}$ | $\leq 20 \times 10^{-4}$ | $\leq 165 \times 10^{-4}$ |
| $4.3 \mu\text{F} < C \leq 4.7 \mu\text{F}$ | $\leq 20 \times 10^{-4}$ | $\leq 165 \times 10^{-4}$ |
| $4.7 \mu\text{F} < C \leq 5.1 \mu\text{F}$ | $\leq 20 \times 10^{-4}$ | $\leq 165 \times 10^{-4}$ |
| $5.1 \mu\text{F} < C \leq 5.6 \mu\text{F}$ | $\leq 20 \times 10^{-4}$ | $\leq 175 \times 10^{-4}$ |
| $5.6 \mu\text{F} < C \leq 6.2 \mu\text{F}$ | $\leq 40 \times 10^{-4}$ | $\leq 195 \times 10^{-4}$ |
| Rated voltage pulse slope (dU/dt) _R : | | |
| l = 12.5 mm | | 60 V/μs |
| l = 17.5 mm | | 50 V/μs |
| l = 26.0 mm | | 25 V/μs |
| l = 31.0 mm | | 15 V/μs (b < 15 mm) |
| l = 31.0 mm | | 7.5 V/μs (b ≥ 15 mm) |
| R between leads for C ≤ 1.0 μF at 100 V; 1 min | | > 100 000 MΩ |
| RC between leads, for C > 1 μF at 100 V; 1 min | | > 100 000 s |
| R between interconnected leads and case; 100 V; 1 min | | > 100 000 MΩ |
| Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time ≤ 1000 V/s | | 256 V; 1 min |
| Withstanding (DC) voltage between leads and case | | 2840 V; 1 min |

Note

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



| ELECTRICAL DATA AND ORDERING CODE | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------|------------------------------------------------------------|-------|---------------------------------------|------|
| U _{RDC} (V) | CAP. (μF) | DIMENSIONS w x h x l (mm) | MASS ⁽³⁾ (g) | CATALOG NUMBER BFC2 379 AND PACKAGING | | | |
| | | | | LOOSE IN BOX | | REEL ⁽²⁾ | |
| | | | | l _t = 4.0 mm + 1.0 mm / - 0.5 mm ⁽¹⁾ | | H = 18.5 mm, P ₀ = 12.7 mm | |
| | | | | C-TOL. = ± 5 % | SPQ | SPQ | |
| LAST 5 DIGITS OF CATALOG NUMBER | | | | | | | |
| PITCH = 10.0 mm ± 0.4 mm; d_t = 0.60 mm ± 0.06 mm; U_{RAC} = 100 V; U_{p-p} = 280 V | | | | | | | |
| 160 | 0.075 | 4.0 x 10.0 x 12.5 | 0.60 | 34753 | 1000 | 1400 | |
| | 0.082 | | | 34823 | | | |
| | 0.091 | | | 34913 | | | |
| | 0.10 | | | 34104 | | | |
| | 0.11 | | | 34114 | | | |
| | 0.12 | 34124 | 1100 | | | | |
| | 0.13 | 34134 | | | | | |
| | 0.15 | 34154 | | | | | |
| | 0.16 | 5.0 x 11.0 x 12.5 | 0.82 | 34164 | 1000 | 900 | |
| | PITCH = 15.0 mm ± 0.4 mm; d_t = 0.60 mm ± 0.06 mm; U_{RAC} = 100 V; U_{p-p} = 280 V | | | | | | |
| | 160 | 0.18 | 5.0 x 11.0 x 17.5 | 1.0 | 34184 | 1000 | 1100 |
| | | 0.20 | | | 34204 | | |
| | | 0.22 | | | 34224 | | |
| | | 0.24 | | | 34244 | | |
| | | 0.27 | | | 34274 | | |
| | | 0.30 | 34304 | 900 | | | |
| 0.33 | | 6.0 x 12.0 x 17.5 | 1.4 | 34334 | 1000 | 900 | |
| 0.36 | | | | 34364 | | | |
| 0.39 | | | | 34394 | | 800 | |
| 0.43 | | | | 34434 | | | |
| 0.47 | 34474 | | | | | | |
| PITCH = 15.0 mm ± 0.4 mm; d_t = 0.80 mm ± 0.08 mm; U_{RAC} = 100 V; U_{p-p} = 280 V | | | | | | | |
| 160 | 0.51 | 7.0 x 13.5 x 17.5 | 1.8 | 34514 | 1000 | 800 | |
| | 0.56 | | | 34564 | | 650 | |
| | 0.62 | | | 34624 | | | |
| | 0.68 | 8.5 x 15.0 x 17.5 | 2.4 | 34684 | 1000 | 650 | |
| | 0.75 | | | 34754 | | | |
| PITCH = 22.5 mm ± 0.4 mm; d_t = 0.80 mm ± 0.08 mm; U_{RAC} = 100 V; U_{p-p} = 280 V | | | | | | | |
| 160 | 0.82 | 6.0 x 15.5 x 26.0 | 2.4 | 34824 | 200 | 550 | |
| | 0.91 | | | 34914 | | | |
| | 1.0 | 7.0 x 16.5 x 26.0 | 2.9 | 34105 | 200 | 450 | |
| | 1.1 | | | 34115 | | | |
| | 1.2 | | | 34125 | | | |
| | 1.3 | 8.5 x 18.0 x 26.0 | 3.8 | 34135 | 200 | 450 | |
| | 1.5 | | | 34155 | | 350 | |
| | 1.6 | | | 34165 | | | |
| | 1.8 | | | 34185 | | | |
| | PITCH = 27.5 mm ± 0.4 mm; d_t = 0.80 mm ± 0.08 mm; U_{RAC} = 100 V; U_{p-p} = 280 V | | | | | | |
| | 160 | 2.0 | 9.0 x 19.0 x 31.5 | 5.5 | 34205 | 100 | |
| | | 2.2 | | | 34225 | | |
| | | 2.4 | 11.0 x 21.0 x 31.0 | 7.4 | 34245 | 100 | |
| | | 2.7 | | | 34275 | | |
| 3.0 | | 34305 | | | | | |
| 3.3 | | 34335 | | | | | |
| 3.6 | | 13.0 x 23.0 x 31.0 | 9.2 | 34365 | 100 | | |
| 3.9 | | | | 34395 | | | |
| 4.3 | | | | 34435 | | | |
| 4.7 | | 15.0 x 25.0 x 31.5 | 12.3 | 34475 | 100 | | |
| 5.1 | 34515 | | | | | | |
| 5.6 | 34565 | | | | | | |
| 6.2 | 18.0 x 28.0 x 31.5 | 16.1 | 34625 | 100 | | | |

Notes

- SPQ = Standard Packing Quantity
- (1) l_t = 4.0 mm + 1 mm / - 0.5 mm for pitch = 10 mm and 3.5 mm ± 0.3 mm for pitch = 15 mm; 22.5 mm and 27.5 mm.
- (2) H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information: www.vishay.com/doc?28139
- (3) Weight for short lead product only



| SPECIFIC REFERENCE DATA - 250 V _{DC} | | |
|---------------------------------------------------------------------------------------|-------------------------|--------------------------|
| DESCRIPTION | VALUE | |
| | at 10 kHz | at 100 kHz |
| Tangent of loss angle: | | |
| 0.047 μF < C ≤ 0.075 μF | ≤ 5 x 10 ⁻⁴ | ≤ 20 x 10 ⁻⁴ |
| 0.075 μF < C ≤ 0.011 μF | ≤ 5 x 10 ⁻⁴ | ≤ 25 x 10 ⁻⁴ |
| 0.11 μF < C ≤ 0.18 μF | ≤ 10 x 10 ⁻⁴ | ≤ 30 x 10 ⁻⁴ |
| 0.18 μF < C ≤ 0.3 μF | ≤ 10 x 10 ⁻⁴ | ≤ 40 x 10 ⁻⁴ |
| 0.30 μF < C ≤ 0.39 μF | ≤ 10 x 10 ⁻⁴ | ≤ 45 x 10 ⁻⁴ |
| 0.39 μF < C ≤ 0.56 μF | ≤ 15 x 10 ⁻⁴ | ≤ 80 x 10 ⁻⁴ |
| 0.56 μF < C ≤ 0.68 μF | ≤ 15 x 10 ⁻⁴ | ≤ 80 x 10 ⁻⁴ |
| 0.68 μF < C ≤ 0.82 μF | ≤ 15 x 10 ⁻⁴ | ≤ 80 x 10 ⁻⁴ |
| 0.82 μF < C ≤ 0.91 μF | ≤ 15 x 10 ⁻⁴ | ≤ 90 x 10 ⁻⁴ |
| 0.91 μF < C ≤ 1.0 μF | ≤ 15 x 10 ⁻⁴ | ≤ 90 x 10 ⁻⁴ |
| 1.0 μF < C ≤ 1.2 μF | ≤ 15 x 10 ⁻⁴ | ≤ 120 x 10 ⁻⁴ |
| 1.2 μF < C ≤ 1.3 μF | ≤ 15 x 10 ⁻⁴ | ≤ 125 x 10 ⁻⁴ |
| 1.3 μF < C ≤ 1.5 μF | ≤ 15 x 10 ⁻⁴ | ≤ 135 x 10 ⁻⁴ |
| 1.5 μF < C ≤ 1.6 μF | ≤ 15 x 10 ⁻⁴ | ≤ 135 x 10 ⁻⁴ |
| 1.6 μF < C ≤ 1.8 μF | ≤ 15 x 10 ⁻⁴ | ≤ 135 x 10 ⁻⁴ |
| 1.8 μF < C ≤ 2.0 μF | ≤ 15 x 10 ⁻⁴ | ≤ 145 x 10 ⁻⁴ |
| 2.0 μF < C ≤ 2.2 μF | ≤ 10 x 10 ⁻⁴ | ≤ 145 x 10 ⁻⁴ |
| 2.2 μF < C ≤ 2.4 μF | ≤ 15 x 10 ⁻⁴ | ≤ 145 x 10 ⁻⁴ |
| 2.4 μF < C ≤ 2.7 μF | ≤ 15 x 10 ⁻⁴ | ≤ 155 x 10 ⁻⁴ |
| 2.7 μF < C ≤ 3.0 μF | ≤ 15 x 10 ⁻⁴ | ≤ 155 x 10 ⁻⁴ |
| 3.0 μF < C ≤ 3.3 μF | ≤ 20 x 10 ⁻⁴ | ≤ 160 x 10 ⁻⁴ |
| 3.3 μF < C ≤ 3.6 μF | ≤ 20 x 10 ⁻⁴ | ≤ 160 x 10 ⁻⁴ |
| 3.6 μF < C ≤ 3.9 μF | ≤ 20 x 10 ⁻⁴ | ≤ 160 x 10 ⁻⁴ |
| Rated voltage pulse slope (dU/dt) _R : | | |
| l = 12.5 mm | | 70 V/μs |
| l = 17.5 mm | | 60 V/μs |
| l = 26.0 mm | | 30 V/μs |
| l = 31.0 mm | | 20 V/μs (b < 15 mm) |
| l = 31.0 mm | | 10 V/μs (b ≥ 15 mm) |
| R between leads for C ≤ 1.0 μF at 100 V; 1 min | | > 100 000 MΩ |
| RC between leads, for C > 1 μF at 100 V; 1 min | | > 100 000 s |
| R between interconnected leads and case; 100 V; 1 min | | > 100 000 MΩ |
| Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time 1000 V/s | | 400 V; 1 min |
| Withstanding (DC) voltage between leads and case | | 2840 V; 1 min |

Note

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



| ELECTRICAL DATA AND ORDERING CODE | | | | | | |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------|------------------------------------------------------------|------|---------------------------------------|
| U _{RDC} (V) | CAP. (μF) | DIMENSIONS w x h x l (mm) | MASS ⁽³⁾ (g) | CATALOG NUMBER BFC2 379 AND PACKAGING | | |
| | | | | LOOSE IN BOX | | REEL ⁽²⁾ |
| | | | | l _t = 4.0 mm + 1.0 mm / - 0.5 mm ⁽¹⁾ | | H = 18.5 mm, P ₀ = 12.7 mm |
| | | | | C-TOL. = ± 5 % | SPQ | SPQ |
| LAST 5 DIGITS OF CATALOG NUMBER | | | | | | |
| 250 | PITCH = 10.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 160 V; U _{p-p} = 450 V | | | | | |
| | 0.047 | 4.0 x 10.0 x 12.5 | 0.60 | 44473 | 1000 | 1400 |
| | 0.051 | | | 44513 | | |
| | 0.056 | | | 44563 | | |
| | 0.062 | | | 44623 | | |
| | 0.068 | | | 44683 | | |
| | 0.075 | | | 44753 | | |
| | 0.082 | 44823 | 1100 | | | |
| | 0.091 | 44913 | | | | |
| | PITCH = 15.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 160 V; U _{p-p} = 450 V | | | | | |
| | 0.10 | 5.0 x 11.0 x 17.5 | 1.0 | 44104 | 1000 | 1100 |
| | 0.11 | | | 44114 | | |
| | 0.12 | | | 44124 | | |
| | 0.13 | | | 44134 | | |
| | 0.15 | | | 44154 | | |
| | 0.16 | | | 44164 | | |
| | 0.18 | 44184 | 900 | | | |
| | 0.20 | 44204 | | | | |
| | 0.22 | 44224 | | | | |
| | 0.24 | 44244 | | | | |
| | 0.27 | 6.0 x 12.0 x 17.5 | 1.4 | 44274 | 1000 | 800 |
| | 0.30 | | | 44304 | | |
| | 0.33 | | | 44334 | | |
| | 0.36 | | | 44364 | | |
| | PITCH = 15.0 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 160 V; U _{p-p} = 450 V | | | | | |
| | 0.39 | 7.0 x 13.5 x 17.5 | 1.8 | 44394 | 1000 | 650 |
| | 0.43 | | | 44434 | | |
| | 0.47 | | | 44474 | | |
| | PITCH = 22.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 160 V; U _{p-p} = 450 V | | | | | |
| | 0.51 | 6.0 x 15.5 x 26.0 | 2.4 | 44514 | 200 | 550 |
| | 0.56 | | | 44564 | | |
| | 0.62 | | | 44624 | | |
| | 0.68 | | | 44684 | | |
| 0.75 | 7.0 x 16.5 x 26.0 | 2.9 | 44754 | 200 | 450 | |
| 0.82 | | | 44824 | | | |
| 0.91 | | | 44914 | | | |
| 1.0 | | | 44105 | | | |
| 1.1 | 8.5 x 18.0 x 26.0 | 3.8 | 44115 | 200 | 350 | |
| 1.2 | | | 44125 | | | |
| PITCH = 27.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 160 V; U _{p-p} = 450 V | | | | | | |
| 1.3 | 9.0 x 19.0 x 31.5 | 5.5 | 44135 | 100 | | |
| 1.5 | | | 44155 | | | |
| 1.6 | | | 44165 | | | |
| 1.8 | | | 44185 | | | |
| 2.0 | 11.0 x 21.0 x 31.0 | 7.4 | 44205 | 100 | | |
| 2.2 | | | 44225 | | | |
| 2.4 | | | 44245 | | | |
| 2.7 | | | 44275 | | | |
| 3.0 | | | 44305 | | | |
| 3.3 | 13.0 x 23.0 x 31.0 | 9.2 | 44335 | 100 | | |
| 3.6 | | | 44365 | | | |
| 3.9 | | | 44395 | | | |

Notes

- SPQ = Standard Packing Quantity
- (1) l_t = 4.0 mm + 1 mm / - 0.5 mm for pitch = 10 mm and 3.5 mm ± 0.3 mm for pitch = 15 mm; 22.5 mm and 27.5 mm.
- (2) H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information: www.vishay.com/doc?28139
- (3) Weight for short lead product only



| SPECIFIC REFERENCE DATA - 400 V _{DC} | | |
|---------------------------------------------------------------------------------------|-------------------------|--------------------------|
| DESCRIPTION | VALUE | |
| | at 10 kHz | at 100 kHz |
| Tangent of loss angle: | | |
| 0.022 μF < C ≤ 0.027 μF | ≤ 10 x 10 ⁻⁴ | ≤ 15 x 10 ⁻⁴ |
| 0.027 μF < C ≤ 0.075 μF | ≤ 10 x 10 ⁻⁴ | ≤ 20 x 10 ⁻⁴ |
| 0.075 μF < C ≤ 0.11 μF | ≤ 10 x 10 ⁻⁴ | ≤ 25 x 10 ⁻⁴ |
| 0.11 μF < C ≤ 0.18 μF | ≤ 10 x 10 ⁻⁴ | ≤ 30 x 10 ⁻⁴ |
| 0.18 μF < C ≤ 0.3 μF | ≤ 10 x 10 ⁻⁴ | ≤ 40 x 10 ⁻⁴ |
| 0.30 μF < C ≤ 0.39 μF | ≤ 10 x 10 ⁻⁴ | ≤ 45 x 10 ⁻⁴ |
| 0.39 μF < C ≤ 0.56 μF | ≤ 15 x 10 ⁻⁴ | ≤ 80 x 10 ⁻⁴ |
| 0.56 μF < C ≤ 0.68 μF | ≤ 15 x 10 ⁻⁴ | ≤ 80 x 10 ⁻⁴ |
| 0.68 μF < C ≤ 0.82 μF | ≤ 15 x 10 ⁻⁴ | ≤ 80 x 10 ⁻⁴ |
| 0.82 μF < C ≤ 0.91 μF | ≤ 15 x 10 ⁻⁴ | ≤ 90 x 10 ⁻⁴ |
| 0.91 μF < C ≤ 1.0 μF | ≤ 15 x 10 ⁻⁴ | ≤ 90 x 10 ⁻⁴ |
| 1.0 μF < C ≤ 1.2 μF | ≤ 15 x 10 ⁻⁴ | ≤ 120 x 10 ⁻⁴ |
| 1.2 μF < C ≤ 1.3 μF | ≤ 15 x 10 ⁻⁴ | ≤ 125 x 10 ⁻⁴ |
| 1.3 μF < C ≤ 1.5 μF | ≤ 15 x 10 ⁻⁴ | ≤ 135 x 10 ⁻⁴ |
| 1.5 μF < C ≤ 1.6 μF | ≤ 15 x 10 ⁻⁴ | ≤ 135 x 10 ⁻⁴ |
| 1.6 μF < C ≤ 1.8 μF | ≤ 15 x 10 ⁻⁴ | ≤ 135 x 10 ⁻⁴ |
| 1.8 μF < C ≤ 2.0 μF | ≤ 15 x 10 ⁻⁴ | ≤ 145 x 10 ⁻⁴ |
| Rated voltage pulse slope (dU/dt) _R : | | |
| l = 12.5 mm | | 80 V/μs |
| l = 17.5 mm | | 70 V/μs |
| l = 26.0 mm | | 35 V/μs |
| l = 31.0 mm | | 25 V/μs (b < 15 mm) |
| l = 31.0 mm | | 13 V/μs (b ≥ 15 mm) |
| R between leads for C ≤ 1.0 μF at 100 V; 1 min | | > 100 000 MΩ |
| RC between leads, for C > 1 μF at 100 V; 1 min | | > 100 000 s |
| R between interconnected leads and case; 100 V; 1 min | | > 100 000 MΩ |
| Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time 1000 V/s | | 640 V; 1 min |
| Withstanding (DC) voltage between leads and case | | 2840 V; 1 min |

Note

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



| ELECTRICAL DATA AND ORDERING CODE | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------|----------------------------------------------------------|------|---------------------------------------|--|
| U _{RDC} (V) | CAP. (μF) | DIMENSIONS w x h x l (mm) | MASS ⁽³⁾ (g) | CATALOG NUMBER BFC2 379 AND PACKAGING | | | |
| | | | | LOOSE IN BOX | | REEL ⁽²⁾ | |
| | | | | l _t = 4.0 mm + 1.0 mm/- 0.5 mm ⁽¹⁾ | | H = 18.5 mm, P ₀ = 12.7 mm | |
| | | | | C-TOL. = ± 5 % | SPQ | SPQ | |
| LAST 5 DIGITS OF CATALOG NUMBER | | | | | | | |
| PITCH = 10.0 mm ± 0.4 mm; d_t = 0.60 mm ± 0.06 mm; U_{RAC} = 200 V; U_{p-p} = 560 V | | | | | | | |
| 400 | 0.022 | 4.0 x 10.0 x 12.5 | 0.60 | 54223 | 1000 | 1400 | |
| | 0.024 | | | 54243 | | | |
| | 0.027 | | | 54273 | | | |
| | 0.030 | | | 54303 | | | |
| | 0.033 | | | 54333 | | | |
| | 0.036 | | | 54363 | | | |
| | 0.039 | 54393 | 1100 | | | | |
| | 0.043 | 54433 | | | | | |
| | PITCH = 15.0 mm ± 0.4 mm; d_t = 0.60 mm ± 0.06 mm; U_{RAC} = 200 V; U_{p-p} = 560 V | | | | | | |
| | 0.047 | 5.0 x 11.0 x 17.5 | 1.0 | 54473 | 1000 | 1100 | |
| | 0.051 | | | 54513 | | | |
| | 0.056 | | | 54563 | | | |
| | 0.062 | | | 54623 | | | |
| | 0.068 | | | 54683 | | | |
| | 0.075 | | | 54753 | | | |
| | 0.082 | 54823 | 900 | | | | |
| | 0.091 | 54913 | | | | | |
| | 0.10 | 54104 | | | | | |
| 0.11 | 54114 | | | | | | |
| 0.12 | 54124 | 800 | | | | | |
| 0.13 | 54134 | | | | | | |
| 0.15 | 54154 | | | | | | |
| 0.16 | 54164 | 650 | | | | | |
| 0.18 | 54184 | | | | | | |
| PITCH = 15.0 mm ± 0.4 mm; d_t = 0.80 mm ± 0.08 mm; U_{RAC} = 200 V; U_{p-p} = 560 V | | | | | | | |
| 0.20 | 7.0 x 13.5 x 17.5 | 1.8 | 54204 | 1000 | 650 | | |
| | | | 54224 | | | | |
| PITCH = 22.5 mm ± 0.4 mm; d_t = 0.80 mm ± 0.08 mm; U_{RAC} = 200 V; U_{p-p} = 560 V | | | | | | | |
| 0.24 | 6.0 x 15.5 x 26.0 | 2.4 | 54244 | 200 | 550 | | |
| 0.27 | | | 54274 | | | | |
| 0.30 | | | 54304 | | | | |
| 0.33 | 7.0 x 16.5 x 26.0 | 2.9 | 54334 | 200 | 450 | | |
| 0.36 | | | 54364 | | | | |
| 0.39 | | | 54394 | | | | |
| 0.43 | | | 54434 | | | | |
| 0.47 | | | 54474 | | | | |
| 0.51 | | | 54514 | | | | |
| 0.56 | 54564 | 350 | | | | | |
| 0.62 | 54624 | | | | | | |
| PITCH = 27.5 mm ± 0.4 mm; d_t = 0.80 mm ± 0.08 mm; U_{RAC} = 200 V; U_{p-p} = 560 V | | | | | | | |
| 0.68 | 9.0 x 19.0 x 31.5 | 5.5 | 54684 | 100 | | | |
| 0.75 | | | 54754 | | | | |
| 0.82 | | | 54824 | | | | |
| 0.91 | 11.0 x 21.0 x 31.0 | 7.4 | 54914 | 100 | | | |
| 1.0 | | | 54105 | | | | |
| 1.1 | | | 54115 | | | | |
| 1.2 | | | 54125 | | | | |
| 1.3 | | | 54135 | | | | |
| 1.5 | | | 54155 | | | | |
| 1.6 | 54165 | 100 | | | | | |
| 1.8 | 54185 | | | | | | |
| 2.0 | 15.0 x 25.0 x 31.5 | 12.3 | 54205 | 100 | | | |

Notes

- SPQ = Standard Packing Quantity
- (1) l_t = 4.0 mm + 1 mm / - 0.5 mm for pitch = 10 mm and 3.5 mm ± 0.3 mm for pitch = 15 mm; 22.5 mm and 27.5 mm.
- (2) H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information: www.vishay.com/doc?28139
- (3) Weight for short lead product only



| SPECIFIC REFERENCE DATA - 630 V _{DC} | | |
|---------------------------------------------------------------------------------------|-------------------------|-------------------------|
| DESCRIPTION | VALUE | |
| | at 10 kHz | at 100 kHz |
| Tangent of loss angle: | | |
| 0.010 μF < C ≤ 0.027 μF | ≤ 10 x 10 ⁻⁴ | ≤ 15 x 10 ⁻⁴ |
| 0.027 μF < C ≤ 0.075 μF | ≤ 10 x 10 ⁻⁴ | ≤ 20 x 10 ⁻⁴ |
| 0.075 μF < C ≤ 0.11 μF | ≤ 10 x 10 ⁻⁴ | ≤ 25 x 10 ⁻⁴ |
| 0.11 μF < C ≤ 0.18 μF | ≤ 10 x 10 ⁻⁴ | ≤ 30 x 10 ⁻⁴ |
| 0.18 μF < C ≤ 0.30 μF | ≤ 10 x 10 ⁻⁴ | ≤ 40 x 10 ⁻⁴ |
| 0.30 μF < C ≤ 0.39 μF | ≤ 10 x 10 ⁻⁴ | ≤ 40 x 10 ⁻⁴ |
| 0.39 μF < C ≤ 0.56 μF | ≤ 10 x 10 ⁻⁴ | ≤ 45 x 10 ⁻⁴ |
| 0.56 μF < C ≤ 0.68 μF | ≤ 15 x 10 ⁻⁴ | ≤ 80 x 10 ⁻⁴ |
| 0.68 μF < C ≤ 0.82 μF | ≤ 15 x 10 ⁻⁴ | ≤ 80 x 10 ⁻⁴ |
| 0.82 μF < C ≤ 1.0 μF | ≤ 15 x 10 ⁻⁴ | ≤ 90 x 10 ⁻⁴ |
| Rated voltage pulse slope (dU/dt) _R : | | |
| l = 12.5 mm | | 100 V/μs |
| l = 17.5 mm | | 90 V/μs |
| l = 26.0 mm | | 45 V/μs |
| l = 31.0 mm | | 30 V/μs (b < 15 mm) |
| l = 31.0 mm | | 15 V/μs (b ≥ 15 mm) |
| R between leads for C ≤ 1.0 μF at 500 V; 1 min | | > 100 000 MΩ |
| RC between leads, for C > 1 μF at 100 V; 1 min | | > 100 000 s |
| R between interconnected leads and case; 500 V; 1 min | | > 100 000 MΩ |
| Withstanding (DC) voltage (cut off current 10 mA) ⁽¹⁾ ; rise time 1000 V/s | | 960 V; 1 min |
| Withstanding (DC) voltage between leads and case | | 2840 V; 1 min |

Note

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



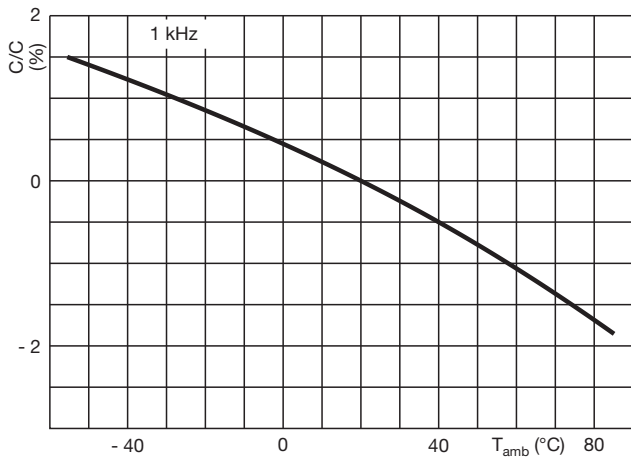
| ELECTRICAL DATA AND ORDERING CODE | | | | | | |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------|----------------------------------------------------------|------|---------------------------------------|
| U _{RDC} (V) | CAP. (μF) | DIMENSIONS w x h x l (mm) | MASS ⁽³⁾ (g) | CATALOG NUMBER BFC2 379 AND PACKAGING | | |
| | | | | LOOSE IN BOX | | REEL ⁽²⁾ |
| | | | | l _t = 4.0 mm + 1.0 mm/- 0.5 mm ⁽¹⁾ | | H = 18.5 mm, P ₀ = 12.7 mm |
| | | | | C-TOL. = ± 5 % | SPQ | SPQ |
| LAST 5 DIGITS OF CATALOG NUMBER | | | | | | |
| 630 | PITCH = 10.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 220 V; U _{p-p} = 620 V | | | | | |
| | 0.010 | 4.0 x 10.0 x 12.5 | 0.60 | 64103 | 1000 | 1400 |
| | 0.011 | | | 64113 | | |
| | 0.012 | | | 64123 | | |
| | 0.013 | | | 64133 | | |
| | 0.015 | | | 64153 | | |
| | 0.016 | | | 64163 | | |
| | 0.018 | | | 64183 | | |
| | 0.020 | | | 64203 | | |
| | 0.022 | 64223 | 1100 | | | |
| | 0.024 | 64243 | | | | |
| | PITCH = 15.0 mm ± 0.4 mm; d _t = 0.60 mm ± 0.06 mm; U _{RAC} = 220 V; U _{p-p} = 620 V | | | | | |
| | 0.027 | 5.0 x 11.0 x 17.5 | 1.0 | 64273 | 1000 | 1100 |
| | 0.030 | | | 64303 | | |
| | 0.033 | | | 64333 | | |
| | 0.036 | | | 64363 | | |
| | 0.039 | | | 64393 | | |
| | 0.043 | | | 64433 | | |
| | 0.047 | | | 64473 | | |
| | 0.051 | | | 64513 | | |
| | 0.056 | 64563 | 900 | | | |
| | 0.062 | 64623 | | | | |
| | 0.068 | 64683 | 800 | | | |
| | 0.075 | 6.0 x 12.0 x 17.5 | 1.4 | 64753 | 1000 | 800 |
| | 0.082 | | | 64823 | | |
| | 0.091 | | | 64913 | | |
| | 0.10 | | | 64104 | | 650 |
| | PITCH = 15.0 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 220 V; U _{p-p} = 620 V | | | | | |
| | 0.11 | 7.0 x 13.5 x 17.5 | 1.8 | 64114 | 1000 | 650 |
| | PITCH = 22.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 220 V; U _{p-p} = 620 V | | | | | |
| 0.12 | 6.0 x 15.5 x 26.0 | 2.4 | 64124 | 200 | 550 | |
| 0.13 | | | 64134 | | | |
| 0.15 | | | 64154 | | | |
| 0.16 | | | 64164 | | | |
| 0.18 | 64184 | 450 | | | | |
| 0.20 | 7.0 x 16.5 x 26.0 | 2.9 | 64204 | 200 | 450 | |
| 0.22 | | | 64224 | | | |
| 0.24 | | | 64244 | | 350 | |
| 0.27 | 8.5 x 18.0 x 26.0 | 3.8 | 64274 | 200 | 350 | |
| 0.30 | | | 64304 | | | |
| PITCH = 27.5 mm ± 0.4 mm; d _t = 0.80 mm ± 0.08 mm; U _{RAC} = 220 V; U _{p-p} = 620 V | | | | | | |
| 0.33 | 9.0 x 19.0 x 31.5 | 5.5 | 64334 | 100 | | |
| 0.36 | | | 64364 | | | |
| 0.39 | | | 64394 | | | |
| 0.43 | | | 64434 | | | |
| 0.47 | | | 64474 | | | |
| 0.51 | | | 64514 | | | |
| 0.56 | 11.0 x 21.0 x 31.0 | 7.4 | 64564 | 100 | | |
| 0.62 | | | 64624 | | | |
| 0.68 | | | 64684 | | | |
| 0.75 | | | 64754 | | | |
| 0.82 | | | 64824 | | | |
| 0.91 | 13.0 x 23.0 x 31.0 | 9.2 | 64914 | 100 | | |
| 1.0 | | | 64105 | | | |

Notes

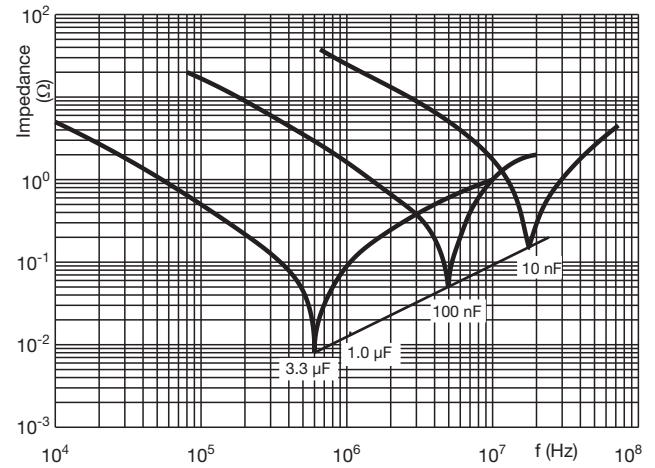
- SPQ = Standard Packing Quantity
- U_{RAC} = 250 V/U_{p-p} = 700 V for C > 0.11 μF.
- (1) l_t = 4.0 mm + 1 mm / - 0.5 mm for pitch = 10 mm and 3.5 mm ± 0.3 mm for pitch = 15 mm; 22.5 mm and 27.5 mm.
- (2) H = in-tape height; P₀ = sprocket hole distance; for detailed specifications refer to packaging information: www.vishay.com/doc?28139
- (3) Weight for short lead product only



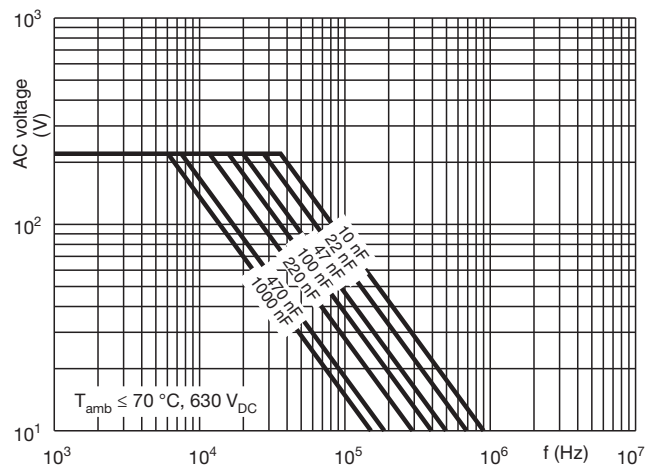
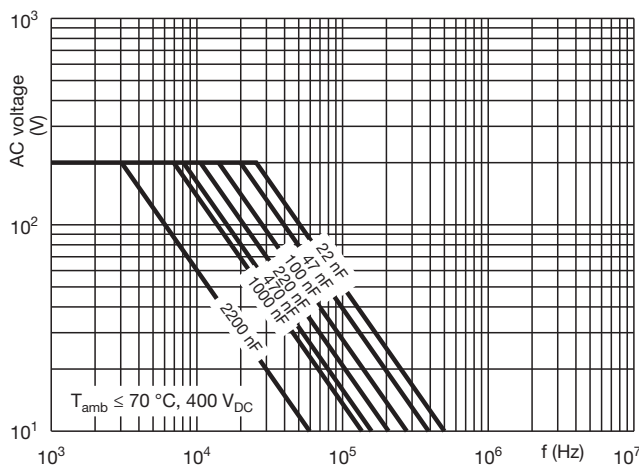
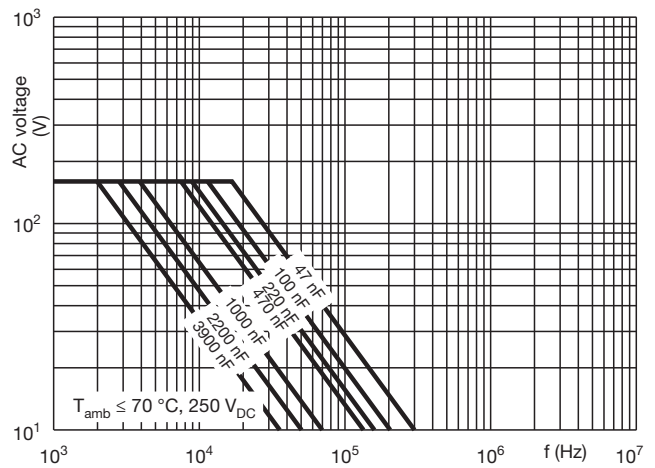
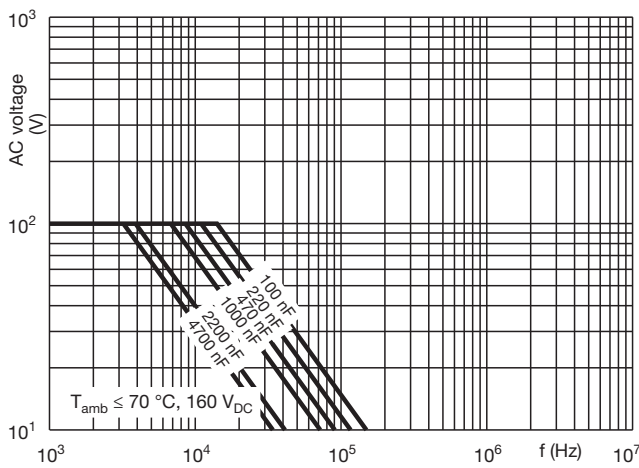
CAPACITANCE



IMPEDANCE



MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY





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