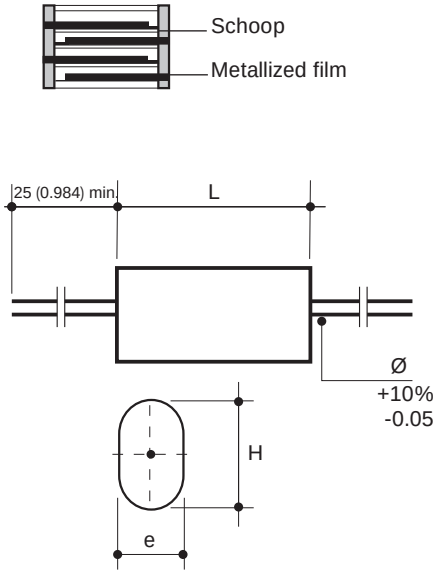
# Metallized Polypropylene

## SA-Voltage Gradient Film Dielectric Capacitors




**Voltage Gradients According to Voltage and Size**

| Tension/Voltage $V_{R-}$ | Tension/Voltage $V_{R\sim}$ (eff/rms) | Format Size | Gradient* $(du/dt)_R$ (V/µs) |
|---|---|---|---|
| 160V | 100V | 10 | 1200 |
| | | 13 | 850 |
| | | 18 | 400 |
| | | 27 | 160 |
| | | 31 | 110 |
| 250V | 160V | 10 | 1310 |
| | | 13 | 1000 |
| | | 18 | 440 |
| | | 27 | 195 |
| | | 31 | 150 |
| 400V | 200V | 10 | 1620 |
| | | 13 | 1250 |
| | | 18 | 985 |
| | | 27 | 260 |
| | | 31 | 200 |
| 630V | 250V | 10 | 2750 |
| | | 13 | 2500 |
| | | 18 | 1930 |
| | | 27 | 1090 |
| | | 31 | 760 |

Absolute limits which must not be exceeded for rapid discharges with nominal voltage $V_{R-}$

### HOW TO ORDER

**SA18 6 G 0334 J --**

① ② ③ ④ ⑤ ⑥

① **Type and Size**

② **Dielectric Class:** Polypropylene

③ **Voltage:** F = 160
G = 250
I = 400
K = 630

④ **Capacitance Value:** 10,000pF

⑤ **Tolerance**

⑥ **Suffix**

*For nominal rms currents consult AVX.

**Nominal Voltage ($V_R$) and Capacitance Values ($C_R$) Depending on the Dimensions**

| Size Code | DIMENSIONS: millimeters (inches) Max L | Max H | Max e | Ø +10% -0.05 | Range of Capacitances ($C_R$ min. ... max.) $V_{R-}$ / $V_{R\sim}$ F 160/100 | G 250/160 | I 400/200 | K 630/250 |
|---|---|---|---|---|---|---|---|---|
| 10 | 12.0 (0.472) | 7.5 (0.295) | 4.5 (0.177) | 0.6 (0.024) | 16nF ~ 33nF | 9.1nF ~ 15nF | 5.6nF ~ 8.2nF | 1nF ~ 5.1nF |
| 13 | 14.5 (0.571) | 7.5 (0.295) | 4.5 (0.177) | 0.6 (0.024) | 36nF ~ 68nF | 16nF ~ 30nF | 9.1nF ~ 16nF | 5.6nF ~ 10nF |
| | 14.5 (0.571) | 11.0 (0.433) | 4.5 (0.177) | 0.6 (0.024) | 75nF ~ 0.13µF | 33nF ~ 56nF | 18nF ~ 33nF | 11nF ~ 20nF |
| 18 | 20.0 (0.787) | 11.0 (0.433) | 4.5 (0.177) | 0.8 (0.031) | 0.15µF ~ 0.24µF | 62nF ~ 0.11µF | 36nF ~ 62nF | 22nF ~ 39nF |
| | 20.0 (0.787) | 11.0 (0.433) | 5.75 (0.226) | 0.8 (0.031) | 0.27µF ~ 0.33µF | 0.12µF ~ 0.13µF | 68nF ~ 82nF | 43nF ~ 51nF |
| | 20.0 (0.787) | 12.0 (0.472) | 7.0 (0.276) | 0.8 (0.031) | 0.36µF ~ 0.47µF | 0.15µF ~ 0.20µF | 91nF ~ 0.11µF | 56nF ~ 75nF |
| | 20.0 (0.787) | 13.0 (0.512) | 8.25 (0.325) | 0.8 (0.031) | 0.51µF ~ 0.56µF | 0.22µF ~ 0.27µF | 0.12µF ~ 0.15µF | 82nF ~ 0.1µF |
| | 20.0 (0.787) | 14.0 (0.551) | 9.5 (0.374) | 0.8 (0.031) | 0.62µF ~ 0.75µF | 0.30µF ~ 0.33µF | 0.16µF ~ 0.18µF | 0.11µF ~ 0.12µF |
| | 20.0 (0.787) | 16.0 (0.630) | 9.5 (0.374) | 0.8 (0.031) | 0.82µF ~ 0.91µF | 0.36µF ~ 0.43µF | 0.20µF ~ 0.24µF | 0.13µF ~ 0.15µF |
| | 20.0 (0.787) | 18.0 (0.709) | 12.0 (0.472) | 0.8 (0.031) | 1µF ~ 1.3µF | 0.47µF ~ 0.56µF | 0.27µF ~ 0.33µF | 0.16µF ~ 0.22µF |
| | 20.0 (0.787) | 22.0 (0.866) | 14.0 (0.551) | 0.8 (0.031) | 1.5µF ~ 2µF | 0.62µF ~ 0.82µF | 0.36µF ~ 0.51µF | 0.24µF ~ 0.33µF |
| | 20.0 (0.787) | 26.0 (1.024) | 16.5 (0.650) | 0.8 (0.031) | 2.2µF ~ 2.7µF | 0.91µF ~ 1.2µF | 0.56µF ~ 0.68µF | 0.36µF ~ 0.47µF |
| 27 | 28.5 (1.122) | 12.0 (0.472) | 7.0 (0.276) | 1.0 (0.039) | 0.82µF | 0.36µF ~ 0.39µF | 0.20µF ~ 0.22µF | 0.13µF |
| | 28.5 (1.122) | 13.5 (0.531) | 7.0 (0.276) | 1.0 (0.039) | 0.91µF ~ 1µF | 0.43µF | 0.24µF | 0.15µF ~ 0.16µF |
| | 28.5 (1.122) | 14.5 (0.571) | 8.25 (0.325) | 1.0 (0.039) | 1.1µF ~ 1.3µF | 0.47µF ~ 0.62µF | 0.27µF ~ 0.36µF | 0.18µF ~ 0.22µF |
| | 28.5 (1.122) | 16.0 (0.630) | 9.5 (0.374) | 1.0 (0.039) | 1.5µF ~ 1.6µF | 0.68µF ~ 0.75µF | 0.39µF ~ 0.43µF | 0.24µF ~ 0.30µF |
| | 28.5 (1.122) | 18.0 (0.709) | 12.0 (0.472) | 1.0 (0.039) | 1.8µF ~ 2.4µF | 0.82µF ~ 1.1µF | 0.47µF ~ 0.62µF | 0.33µF ~ 0.39µF |
| | 28.5 (1.122) | 22.0 (0.866) | 14.0 (0.551) | 1.0 (0.039) | 2.7µF ~ 3.6µF | 1.2µF ~ 1.6µF | 0.68µF ~ 0.91µF | 0.43µF ~ 0.62µF |
| | 28.5 (1.122) | 26.0 (1.024) | 16.5 (0.650) | 1.0 (0.039) | 3.9µF ~ 5.1µF | 1.8µF ~ 2.4µF | 1µF ~ 1.3µF | 0.68µF ~ 0.91µF |
| 31 | 33.0 (1.300) | 16.0 (0.630) | 9.5 (0.374) | 1.0 (0.039) | 1.8µF ~ 2µF | 0.82µF ~ 0.91µF | 0.47µF ~ 0.51µF | 0.33µF ~ 0.36µF |
| | 33.0 (1.300) | 19.0 (0.748) | 12.0 (0.472) | 1.0 (0.039) | 2.2µF ~ 3µF | 1µF ~ 1.3µF | 0.56µF ~ 0.82µF | 0.39µF ~ 0.51µF |
| | 33.0 (1.300) | 22.5 (0.886) | 14.5 (0.571) | 1.0 (0.039) | 3.3µF ~ 4.7µF | 1.5µF ~ 2.2µF | 0.91µF ~ 1.2µF | 0.56µF ~ 0.82µF |
| | 33.0 (1.300) | 26.5 (1.043) | 17.0 (0.669) | 1.0 (0.039) | 5.1µF ~ 6.8µF | 2.4µF ~ 3µF | 1.3µF ~ 1.8µF | 0.91µF ~ 1.1µF |
| | 33.0 (1.300) | 28.5 (1.122) | 19.0 (0.748) | 1.0 (0.039) | 7.5µF ~ 8.2µF | 3.3µF ~ 3.9µF | 2µF ~ 2.2µF | 1.2µF ~ 1.3µF |
| | 33.0 (1.300) | 31.0 (1.220) | 21.5 (0.846) | 1.0 (0.039) | 9.1µF ~ 10µF | 4.3µF ~ 4.7µF | 2.4µF ~ 2.7µF | 1.5µF ~ 1.8µF |

Values from the E24 Series (tol. ±5%)