

Capacitors for Power Electronics (PEC) - Cylindrical



FEATURES

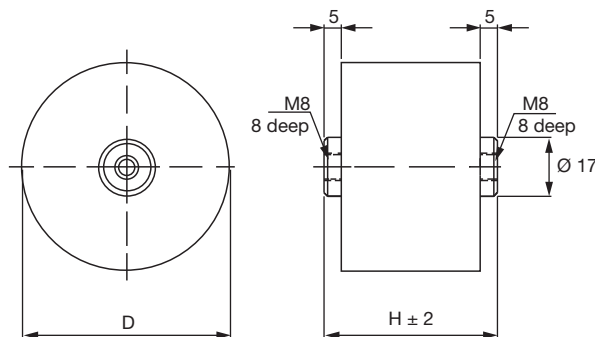
- Very low stray inductance: < 10 nH
- Extremely low losses at high frequencies 4×10^{-4} at 2 kHz
- Low ESR: < 4 m Ω
- Highest RMS current rating: up to 100 A
- High impulse discharge current capability
- Resistance to heavy duty shock vibration
- High reliability and life expectancy
- Casing material: UL 94 V-0

APPLICATIONS

- Voltage converters
- Frequency converters
- RFI filters
- Traction drives
- Industrial drives
- UPS
- Medical equipment

| QUICK REFERENCE DATA | |
|--|--|
| DESCRIPTION | VALUE |
| Rated DC voltage min. | 700 V |
| Rated DC voltage max. | 2150 V |
| Capacitance min. | 7.5 μ F |
| Capacitance max. | 230 μ F |
| Technology | Metalized polypropylene film |
| Dissipation factor ($\tan \delta_0$) | 2×10^{-4} at 2 kHz |
| Capacitance tolerance | $\pm 5\%$ |
| Operating temperature (hotspot) | $\theta_{min.} - 40\text{ }^\circ\text{C}$ $\theta_{max.} - 80\text{ }^\circ\text{C}$ |
| Inductance | < 30 nH |
| Lifetime expectancy | 100 000 h at U_{NDC} and $60\text{ }^\circ\text{C}$ hotspot |
| Reliability | 300 FIT |
| Test voltage | Terminal/terminal = $1.5 \times U_{NDC}$, 10 s; Terminal/case = $2 \times U_{NDC} + 1000 V_{AC}$, 60 s |
| Casing material | Polyester, UL 94 V-0 |
| Filling | Resin polyurethane, UL 94 V-0 |
| Standards | IEC 61071-1, IEC 61881, and EN 61071-1 |

DIMENSIONS in millimeters



Drawing 1
GLI.....A



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GLI.....A

Vishay ESTA

| TYPE DESCRIPTION | | | | | | | | | | | | |
|---|------------------------|----------------------------|------------------------|--------------------------|--------------------------|------------------------|------------|----------------|-----------|----------------|-------------------|----------------|
| TYPE GLI...-... A | C _N [μF] | VOLTAGE V _{DC} | R _S [mΩ] | R _{th} [K/W] | I _{MAX.} [A] | I _P [kA] | İ [kA] | HEIGHT [mm] | D [mm] | WEIGHT [kg] | PACKAGING UNIT | DRAWING NO. |
| GLI 700, U_{NDC} = 700 V, U_N = 495 V | | | | | | | | | | | | |
| 700-35 | 35 | 700 | 0.5 | 8.0 | 60.0 | 0.98 | 2.94 | 44 | 87 | 0.4 | 12 | 1 |
| 700-230 | 230 | 700 | 0.8 | 6.4 | 50.0 | 1.33 | 4.01 | 74 | 87 | 0.5 | 12 | 1 |
| GLI 900, U_{NDC} = 900 V, U_N = 635 V | | | | | | | | | | | | |
| 900-25 | 25 | 900 | 0.3 | 7.7 | 80.0 | 0.82 | 2.46 | 44 | 87 | 0.3 | 12 | 1 |
| 900-100 | 100 | 900 | 0.7 | 7.1 | 50.0 | 1.00 | 3.00 | 64 | 87 | 0.4 | 12 | 1 |
| 900-150 | 150 | 900 | 0.9 | 6.3 | 52.0 | 1.09 | 3.27 | 74 | 87 | 0.4 | 12 | 1 |
| GLI 1100, U_{NDC} = 1100 V, U_N = 775 V | | | | | | | | | | | | |
| 1100-15 | 15 | 1100 | 0.4 | 7.7 | 75.0 | 0.63 | 1.89 | 44 | 87 | 0.3 | 12 | 1 |
| 1100-75 | 75 | 1100 | 0.7 | 7.3 | 55.0 | 0.90 | 2.70 | 64 | 87 | 0.4 | 12 | 1 |
| 1100-100 | 100 | 1100 | 1.0 | 6.5 | 45.0 | 0.87 | 2.62 | 74 | 87 | 0.4 | 12 | 1 |
| GLI 1250, U_{NDC} = 1250 V, U_N = 1250 V | | | | | | | | | | | | |
| 1250-50 | 50 | 1250 | 0.9 | 6.9 | 50.0 | 0.70 | 2.10 | 64 | 87 | 0.4 | 12 | 1 |
| 1250-75 | 75 | 1250 | 1.1 | 6.5 | 45.0 | 0.76 | 2.28 | 74 | 87 | 0.5 | 12 | 1 |
| GLI 1450, U_{NDC} = 1450 V, U_N = 1025 V | | | | | | | | | | | | |
| 1450-11 | 11 | 1450 | 0.7 | 6.5 | 50.0 | 0.33 | 1.10 | 74 | 87 | 0.5 | 12 | 1 |
| 1450-60 | 60 | 1450 | 1.2 | 6.3 | 45.0 | 0.70 | 2.10 | 74 | 87 | 0.3 | 12 | 1 |
| GLI 1800, U_{NDC} = 1800 V, U_N = 1270 V | | | | | | | | | | | | |
| 1800-25 | 25 | 1800 | 1.2 | 7.1 | 42.0 | 0.50 | 1.50 | 64 | 87 | 0.4 | 12 | 1 |
| 1800-35 | 35 | 1800 | 1.7 | 6.4 | 38.0 | 0.50 | 1.52 | 74 | 87 | 0.4 | 12 | 1 |
| GLI 2150, U_{NDC} = 2150 V, U_N = 1520 V | | | | | | | | | | | | |
| 2150-7,5 | 75 | 2150 | 3.0 | 11.8 | 20.0 | 0.18 | 0.54 | 64 | 87 | 0.4 | 12 | 1 |
| 2150-25 | 25 | 2150 | 2.1 | 6.0 | 32.0 | 0.43 | 1.30 | 74 | 87 | 0.4 | 12 | 1 |

Note

- Other voltage, current and capacitance values are available on request



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