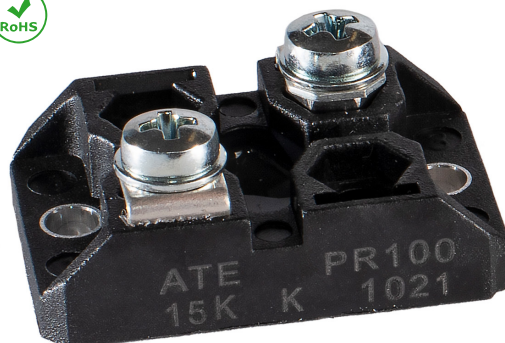


PR100-101 Thick film power resistors
PR102-103

THICK FILM POWER RESISTORS PR100

FEATURES

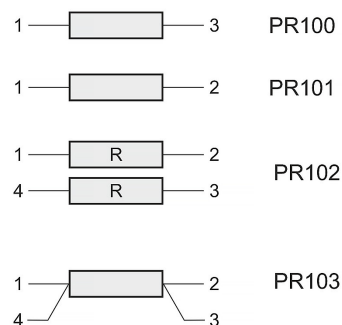
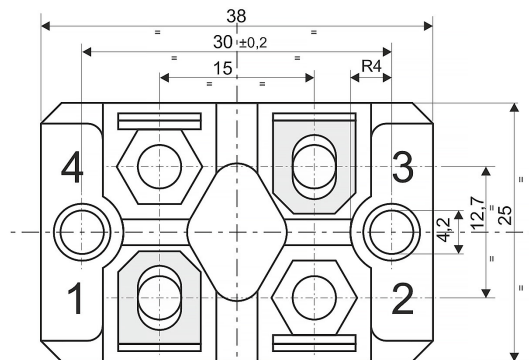
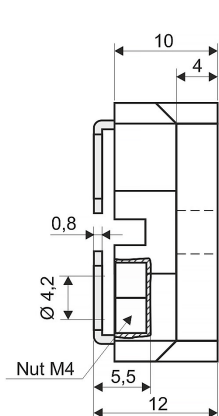
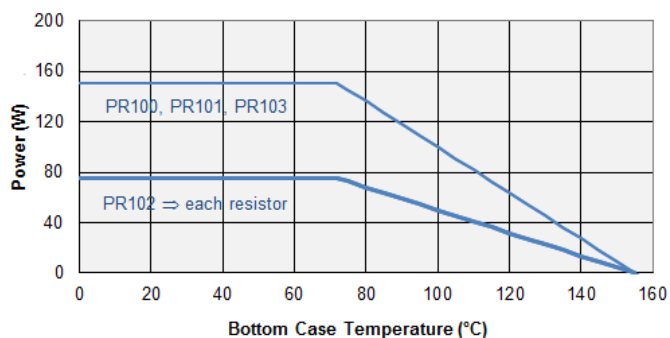
Very good ratio Power / Volume.
Easy mounting and wiring with significant cost advantages.
Non inductive performance for high frequency applications.
One model for power up to 150W.
Suited to UL94-V0 application.
SOT227 configuration.



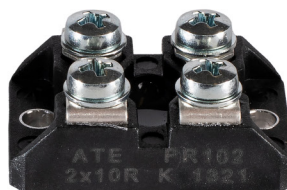
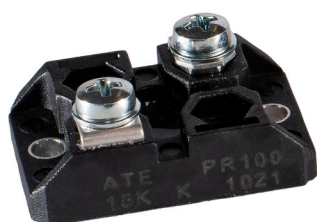
ELECTRICAL SPECIFICATIONS

- Power rating : 100W (PR102 2 x 50W)
- Max power not trimmed : 150W (heatsink at 70°C)
- Resistance range: From 1R0 to 1MΩ, E12 series
- Tolerance: Standard 10%, up to 1% on request
- Temperature coefficient : ± 100 ppm/°C
- Max Work Voltage : 1500 Vac
- Work Temperature Range : From -55°C to +155°C
- Dielectric Strength : 2500 Vac
- Insulation resistance : $> 10^5$ MΩ at 500V
- Partial discharge : < 80 pC @ 2000 Vac (on request)
- Self inductance : 40 nH
- Capacitance to heatsink : < 30 pF
- Overload : 2 Pn x 10 s
- Thermal resistance : 0.5 °C/W
- Heatsink flatness : 0.05 mm Max
- Heatsink surface finish : 6.3µm Max
- Thermal grease : required
- Max torque for contact : 1.2 Nm (static)
- Max torque for mounting : 1.5 Nm (static)
- Weight : 18 g (PR100 / PR101)
24 g (PR102 / PR103)

PR100 - Power derating



Connection and mounting screws supplied with the resistor



THICK FILM POWER RESISTORS PR250

FEATURES

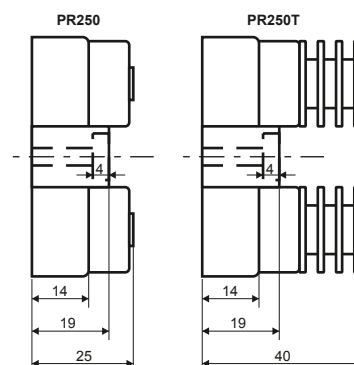
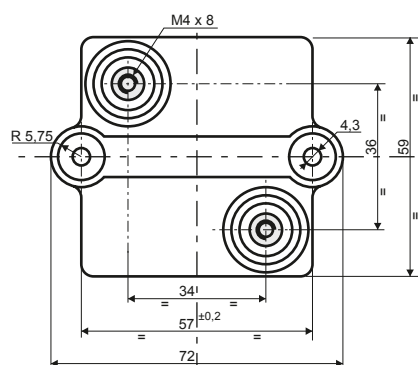
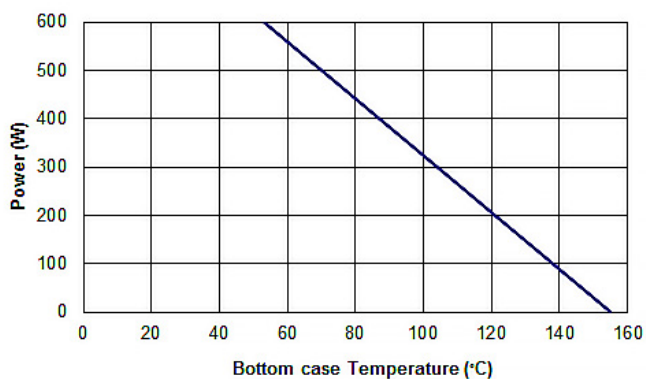
Very good ratio Power / Volume
Easy mounting and wiring with significant cost advantages.
Non inductive performance for high frequency applications.
One models for power applications up to 500W.
Suited to ULV94-V0 application.



ELECTRICAL SPECIFICATIONS

- Power rating: 250W (heatsink at 100°C)
- Resistance range: From 1R0 to 1MΩ, E12 series
- Tolerance: Standard 10%, up to 1% on request
- Temperature coefficient: ± 100 ppm/°C
- Max Work. Voltage: 5000 Vac
- Work Temp. Range: From -55°C to +155°C
- Dielectric Strength: 7000 Vac (12000 Vac x PR250T)
- Insulation resistance: $> 10^5$ MΩ at 500V
- Creep distance: 42 mm (65 mm x PR250T)
- Air gap distance: 16 mm (29mm x PR250T)
- Partial discharge: < 10 pC @ 5000 Vac
- Self inductance: 80 nH
- Parallel capacitance: 40 pF
- Capacitance to heatsink: < 120 pF
- Overload : 4 Pn x 10 s
- Thermal resistance: 0.15 °C/W
- Heatsink flatness: 0.05 mm Max
- Heatsink surface finish: 6.3 μm Max
- Thermal grease: Required $\lambda > 1$ W/mk
- Max torque for contacts: 2Nm (static)
- Max torque for mounting: 2Nm (static)
- Weight: 100 g (130 gr for PR250T)
- Options: For values R039 <R< 1R0 is available Metal Foil type PR500M

PR250 - Power derating



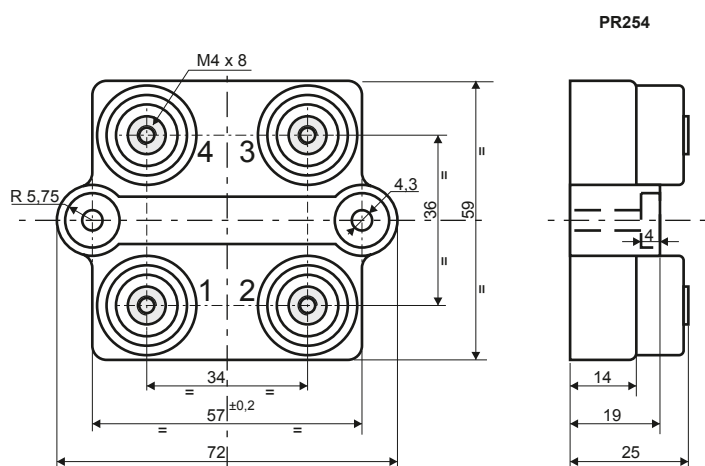
"Connection and mounting screws are supplied with the resistor
All dimensions are in mm"

PR254 Thick film power resistors

THICK FILM POWER RESISTORS PR254

FEATURES

Very good ratio Power / Volume
Easy mounting and wiring with significant cost advantages.
Non inductive performance for high frequency applications.
One models for power applications up to 500W.
Suited to ULV94-V0 application.

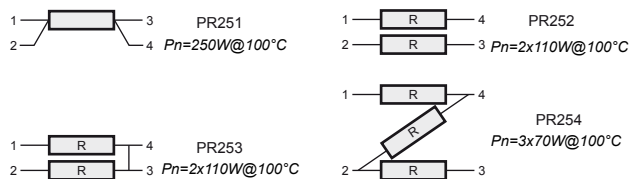
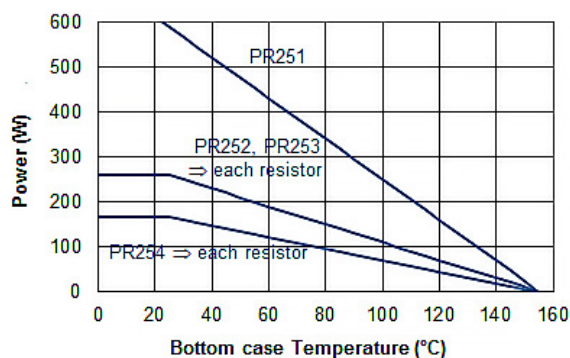


"Connection and mounting screws are supplied with the resistor
All dimensions are in mm"

ELECTRICAL SPECIFICATIONS

- Power rating: 250W (heatsink at 100°C)
- Resistance range: From 1R0 to 1M Ω , E12 series
- Tolerance: Standard 10%, up to 1% on request
- Temperature coefficient: ± 100 ppm/ $^{\circ}$ C
- Max Work. Voltage: 5000 Vac
- Work Temp. Range: From -55°C to +155°C
- Dielectric Strength: 7000 Vac
- Insulation resistance: $> 10^5$ M Ω at 500V
- Creep distance: 42 mm
- Air gap distance: 16 mm
- Partial discharge: < 10 pC @ 5000 Vac
- Self inductance: 80 nH
- Parallel capacitance: 40 pF
- Capacitance to heatsink: < 120 pF
- Overload: $4 P_n \times 10$ s
- Thermal resistance: 0.15 $^{\circ}$ C/W
- Heatsink flatness: 0.05 mm Max
- Heatsink surface finish: 6.3 μ m Max
- Thermal grease: Required $\lambda > 1$ W/mk
- Max torque for contacts: 2Nm (static)
- Max torque for mounting: 2Nm (static)
- Weight: 125 g

PR254 - Power Derating



THICK FILM POWER RESISTOR PR600

FEATURES

Very good ratio Power / Volume
Easy mounting and wiring with significant cost advantages.
Non inductive performance for high frequency applications.
One models for power applications up to 600W.
Suited to UL94-V0 application



ELECTRICAL SPECIFICATIONS

Power rating: 600W @ 85°C Bottom case Temperature
For power greater than 600W
please consult Technical Dept.

Resistance Range: from 1R0 to 1M0

Resistance Values: E12 series

For out of range or not std. values
please contact ATE Electronics Technical Dept.

Tolerance: Standard $\pm 10\%$.

Available on request up to $\pm 1\%$

Temperature coefficient: ± 150 ppm/°C

Work Temperature Range: from -55°C to +155°C

Max Working Voltage: $5kV, \sqrt{(P \times R)}$

Dielectric strength: 7kVac x 60"

Insulation resistance: $> 10^9$ MΩ at 500V

Creep distance: 42mm

Air Gap distance: 16mm

Partial Discharge: < 10 pC @ 5kVac

Self Inductance: 80nH

Parallel Capacitance: 40pF

Capacitance to heatsink: < 110 pF

Overload: 1kW x 10"

Thermal resistance: 0,115°C/W

Heatsink flatness: 0,05mm max

Heatsink surface finish: 6,3μm max

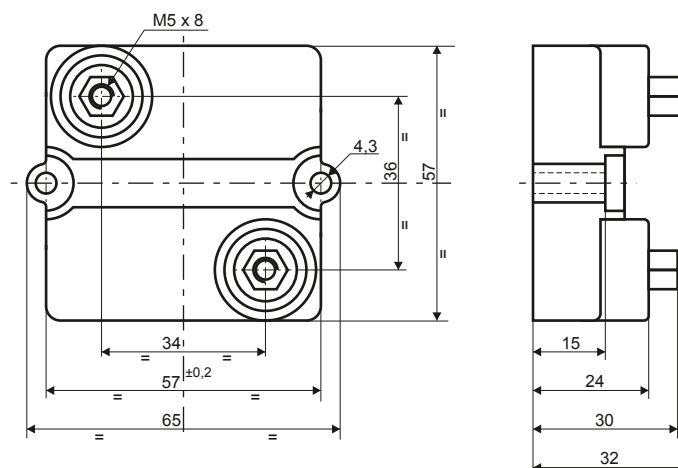
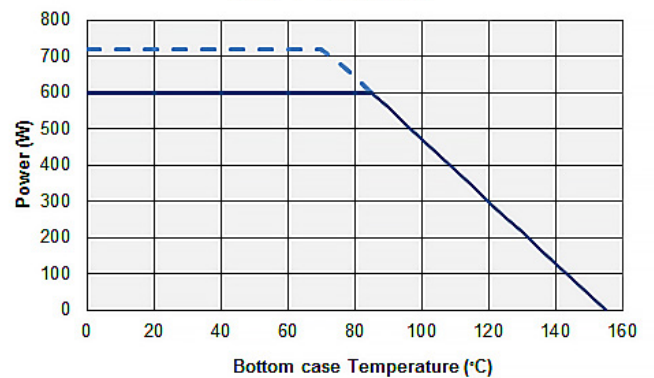
Thermal grease: Required, $\lambda > 1$ W/mK

Max Torque for contacts: 2Nm (static)

Max Torque for mounting: 2Nm (static)

Weight: 95g

PR600 - Power derating



"Connection and mounting screws are supplied with the resistor
All dimensions are in mm"

PR800 Thick film power resistors

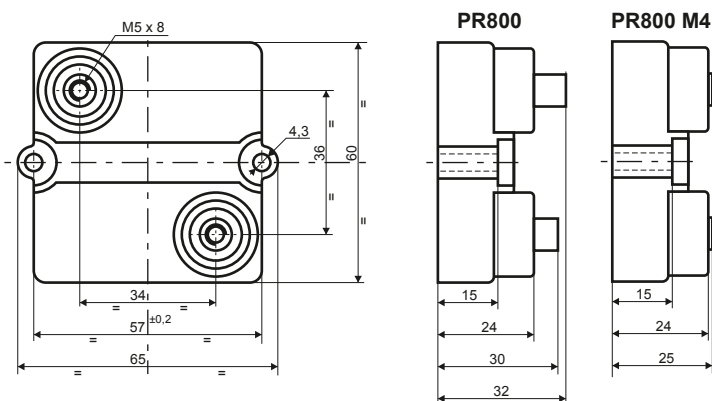
THICK FILM POWER
RESISTOR PR800

FEATURES

Very good ratio Power / Volume
Easy mounting and wiring with significant cost advantages. Non inductive performance for high frequency applications. Materials are ULV94-V0 listed

ELECTRICAL SPECIFICATIONS

- Power rating: 800W @ 85°C Bottom case Temperature
For power greater than 800W please consult Technical Dept.
- Resistance Range: from 1R0 to 1M0-
- Resistance Values: E12 series
For out of range or not std. values, please contact ATE Electronics Technical Dept.
- Tolerance: Standard $\pm 10\%$.
- Temperature coefficient: $\pm 150 \text{ ppm}/^\circ\text{C}$
- Work Temperature Range: from -55°C to $+155^\circ\text{C}$
- Max Working Voltage: $5,2 \text{ kV}$, $V = \sqrt{P \times R}$
- Dielectric strength: $7 \text{ kVac} \times 60''$ (12kVac on request)
- Insulation resistance: $> 10^5 \text{ M}\Omega$ at 500V
- Creep distance: 42mm
- Air Gap distance: 16mm
- Partial Discharge: $< 10 \text{ pC}$ @ 5kVac
- Self Inductance: 80nH (typical)
- Parallel Capacitance: 40pF (typical)
- Capacitance to heatsink: 150pF (typical)
- Overload: $1 \text{ kW} \times 10''$
- Thermal resistance: $0,11^\circ\text{C}/\text{W}$
- Heatsink flatness: $0,05 \text{ mm}$ max
- Heatsink surface finish: $6,3 \mu\text{m}$ max
- Thermal grease: Required, $\lambda > 1 \text{ W/mK}$
- Max Torque for contacts: 2Nm (static)
- Max Torque for mounting: 2Nm (static)
- Weight: 100g



"Connection and mounting screws are supplied with the resistor
All dimensions are in mm"

PR800 - Power derating

