# Series HXP-600

600 W Power Resistor at 85°C bottom case



A Miba Group Company

1/1

Due to our Non-Inductive design, the HXP series is ideally suited for high-frequency and pulse-loading applications. Through direct mounting on a heat sink, significant cost advantage can be realized. Main applications are: variable speed drives, power supplies, control devices, telecommunications, robotics, motor controls and other switching devices.

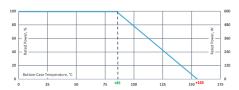
#### **Features**

- multiple resistors in 1 package
- Non-Inductive design
- ROHS compliant
- Materials in accordance with UL 94 V-0
- General pulse load information (ask for details)
- Resistor is also available with preapplied PCM (Phase Change Material) (ask for details)



## **Technical Specifications**

Resistance value	$0.15~\Omega \le 5~K\Omega$ (higher values on special request)
Resistance tolerance	$\pm 5$ % to 10 % (configuration 4,5,6 only tolerance $\pm 10\%$ possible)
Temperature coefficient	$>$ 1R: $\pm 150$ ppm/°C (at +85°C ref. to +25°C) lower TCR on special request for limited ohmic values
Power rating	up to 600 W at 85°C bottom case temperature (see configurations)
Short time overload	1.25x rated power at 85°C bottom case temperature for 10 sec., $\Delta R$ = 0.4% max. (for conf. 1, 2 and 3)
Maximum working voltage	1,000 ∨ DC (up to 2,000 V on special request = "S"-version)
Partial discharge	up to 2,000 V on 80pC (Tests only on special request)
Voltage proof	dielectric strength up to 4,000 V DC against ground
Insulation resistance	> 10 GΩ at 1,000 V DC
Isolation voltage betweeen R1 & R2 & R3	500 V DC (1,000 V DC on special request)
Protection class	acc. to IEC 950/CSA22.2 950/M-89 and EN 60950.88:2
Comparative Tracking Index (CTI)	standard 500 V
Heat resistance to cooling plate	Rth < 0.12 K/W
Capacitance/mass	45 pF (typical), measuring frequency 10 kHz
Serial inductivity	HXP-1 typical 40 nH, measuring frequency 10 kHz
Working temperature range	-55°C to +155°C
Mounting - torque for base plate (static)	1.3 Nm to 1.5 Nm M4 screws
Mounting - torque for contacts (static)	1.1 Nm to 1.3 Nm M4 screws, screw-in depth max. 5mm
Weight	~27 g



Derating (thermal resist.) HXP-600: 8.33 W/K (0.12 K/W) (for conf. 1, 2 and 3)

Best results can be reached by using a thermal transfer compound with a heat conductivity of at least 2.9 W/mK. The flatness of the cooling plate must be better than 0.05 mm overall. Surface roughness should not exceed 6.4  $\mu m$ .

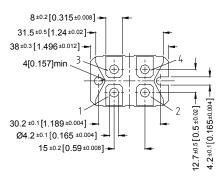
### How to make a request

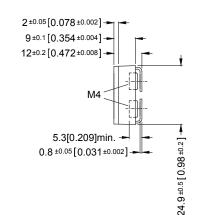
HXP-600-Configuration\_Ohmic Value\_ Tolerance

### For example:

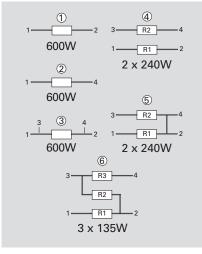
HXP-600-1 27R 10% or HXP-600-4 2x220R 5%

## **Dimensions in mm [inches]**





## Configurations (P / package)



Version 5: ohmic value between contact 2 and 4 =  $3 m \Omega$ 

The above spec. sheet features our standard products. For further options please contact our local EBG representative or contact us directly.

# Disclaimer



A Miba Group Company

The given statements and information herein are recommendations for the use of our products and are based on our experience in combination with applicable technical standards.

They are for guidance only and do not represent any assurance of characteristics or warranty commitments for the products or their suitability for specific applications.

The suitability of the products for the intended use by the user depends on different boundary conditions and influencing factors and is to be assessed exclusively by the user.

#### DISCLAIMER:

NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, IS MADE WITH RESPECT TO THE PRODUCTS, DESIGNS, DATA, INFORMATION DESCRIBED OR ANY INTELLECTUAL PROPERTY CONTAINED THEREIN. ANY WARRANTY OR GUARANTEE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS ALSO EXCLUDED.

The given statements and information herein reflect the current status at the time of publication.

Typing or printing errors cannot be excluded.

This publication shall not be reprinted or reproduced in whole or in part in any form or by any means without the express written permission of EBG.