

# Series WLL-320



A Miba Group Company

Due to our Non-Inductive design, the WLL 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



## Technical Specification

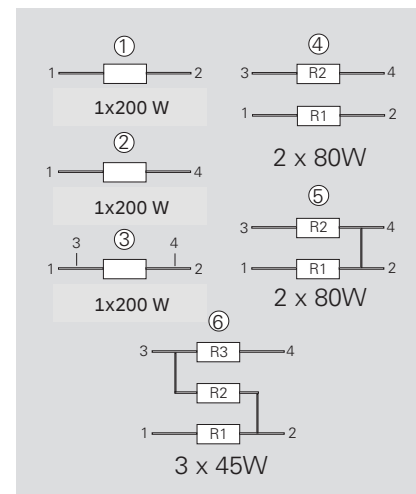
<b>Resistance value</b>	0.1 Ω ≤ 1 MΩ
<b>Resistance tolerance</b>	±1 % to ±10 %
<b>Temperature coefficient</b>	> 1R: ±250 ppm/°C (at +85°C ref. to +25°C) lower TCR on special request for limited ohmic values
<b>Power rating</b>	300 W at 25°C bottom case temperature 200 W at 85°C bottom case temperature
<b>Short time overload</b>	1.25x rated power at 85°C bottom case temperature for 10 sec., ΔR = 0.4% max. (for conf. 1, 2 and 3)
<b>Maximum working voltage</b>	500 V (up to 1,000 V on special request = "S"-version)
<b>Partial discharge</b>	up to 2,000 Vrms / 80pC (only on special request)
<b>Voltage proof</b>	dielectric strength up to 3,000 V DC against ground
<b>Insulation resistance</b>	> 10 GΩ at 1,000 V DC
<b>Isolation voltage between R1 &amp; R2 &amp; R3</b>	500 V DC (1,000 V DC on special request)
<b>Comparative Tracking Index (CTI)</b>	standard > 600 V
<b>Heat resistance to cooling plate</b>	Rth < 0.35 K/W
<b>Capacitance/mass</b>	45 pF (typical), measuring frequency 10 kHz
<b>Serial inductivity</b>	WLL-320 typical 40 nH, measuring frequency 10 kHz
<b>Working temperature range</b>	-55°C to +155°C
<b>Mounting - torque for base plate (static)</b>	1.3 Nm to 1.5 Nm M4 screws
<b>Weight</b>	~22 g (depending on type)

## How to make a request

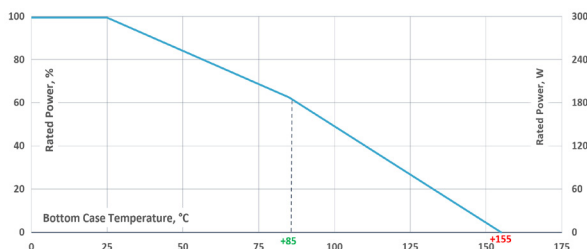
WLL-320\_Ohmic Value\_Tolerance

For example:  
WLL-320 1R 10%

## Configurations (P / package)



Version 5: ohmic value between contact 2 and 4 = 3mΩ



Derating (thermal resist.) WLL-320  
2.86 W/K (0.35 K/W) (for conf. 1, 2 and 3)

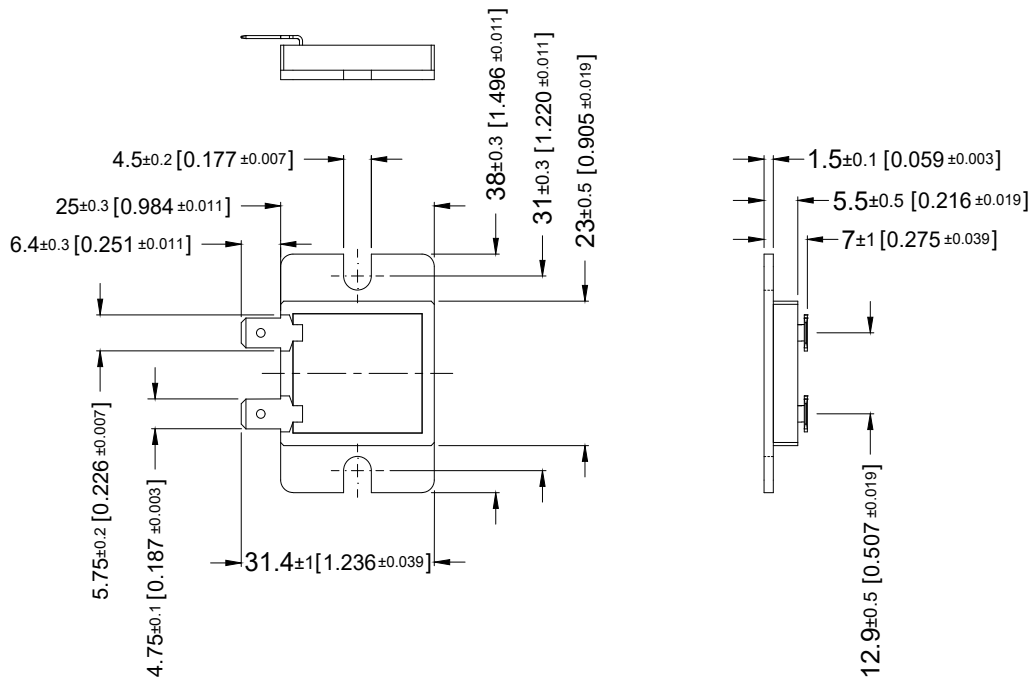
Best results can be reached by using a thermal transfer compound with a heat conductivity of at least 1 W/mK. The flatness of the cooling plate must be better than 0.05 mm overall. Surface roughness should not exceed 6.4 μm.

# Series WLL-320

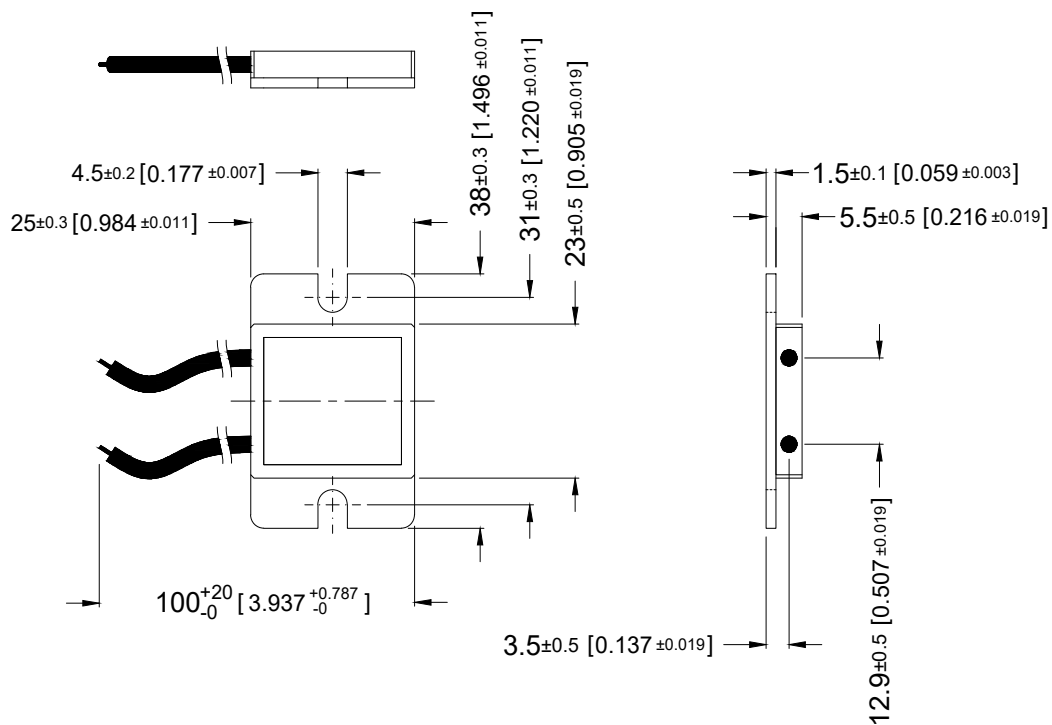


A Miba Group Company

**Standard fast-on connection dimensions in mm [inches]**



**WLL-C (cable connection) dimensions in mm [inches]**  
 only possible for configuration 1  
 (standard cable length = 100mm, others on special request)



# 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.