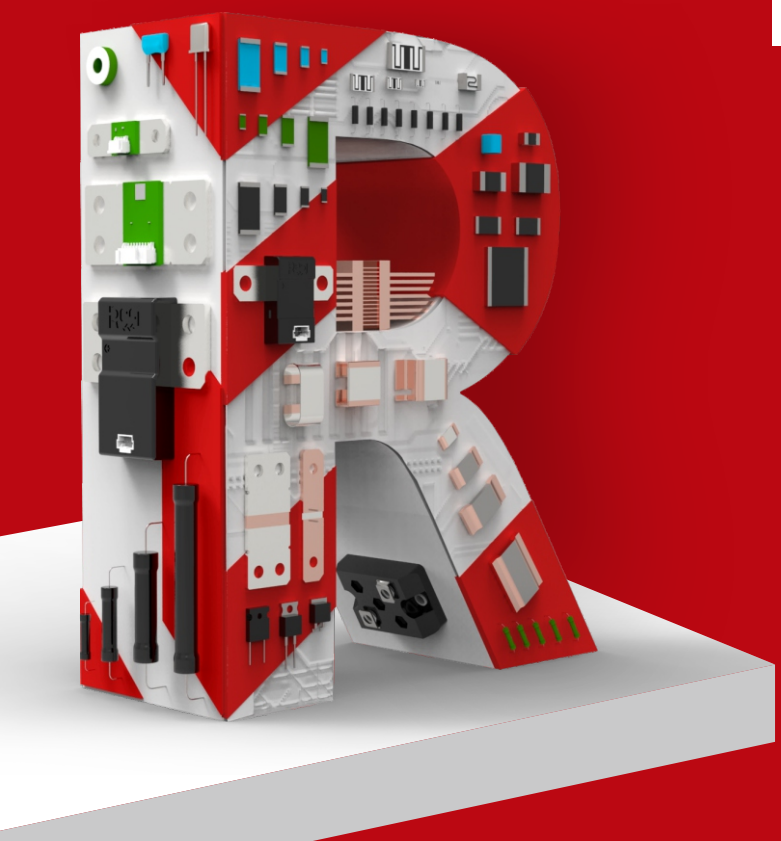
DataSheet No.: E21005
Version: V0
Date: 2025/6/19

睿思

ULVR

High Reliability Pre-charging Resistor

Resistance Range	10Ω~120Ω
Power	100W
TCR	±300ppm/℃



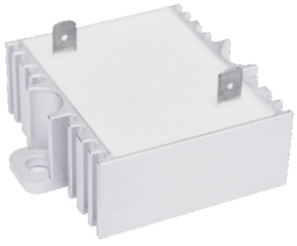
Applications

Motor control
Braking system
X-ray
Industrial communication
Automotive

Better Solution for Sustainable High End Manufacturing

High Reliability Pre-charging Resistor

High power, high reliability, high stability



Introduction

ULVR series adopts high-reliability structure and high-performance materials, endowing the product with superior moisture resistance, insulation characteristics, and overload capability. It operates stably and reliably for extended periods in complex environments, providing robust protection for equipment safety.

This series features FASTON terminals specially designed for automotive, enabling convenient and efficient installation while supporting flexible adjustment of mounting methods. It fully meets diverse application scenario requirements, delivering enhanced user convenience.

RoHS

车规认证 AEC-Q200

Electrical Parameters

Series	Reted Power 70℃	Resistance Range Ω	Tolerance %	TCR ppm/℃	Operating Temperature
ULVR	100W	10~120	±1, ±5	±300	-55℃~+225℃

Part Number Information

Example: ULVR100WF10R0E9 (ULVR 100W ±1% 10Ω ±300ppm/℃ Standard)

U	L	V	R	1	0	0	W	F	1	0	R	0	E	9

Series	Power rating	Tolerance	Resistance	TCR	Code
ULVR	100W=1000W	F=±1.0% J=±5.0%	10R0=10Ω 120R=120Ω	E=±300ppm/℃	9=Standard

C&B Electronics Shenzhen CO., LTD. | www.resistor.today | resi@cbeureka.com | Tel:0755-82899519

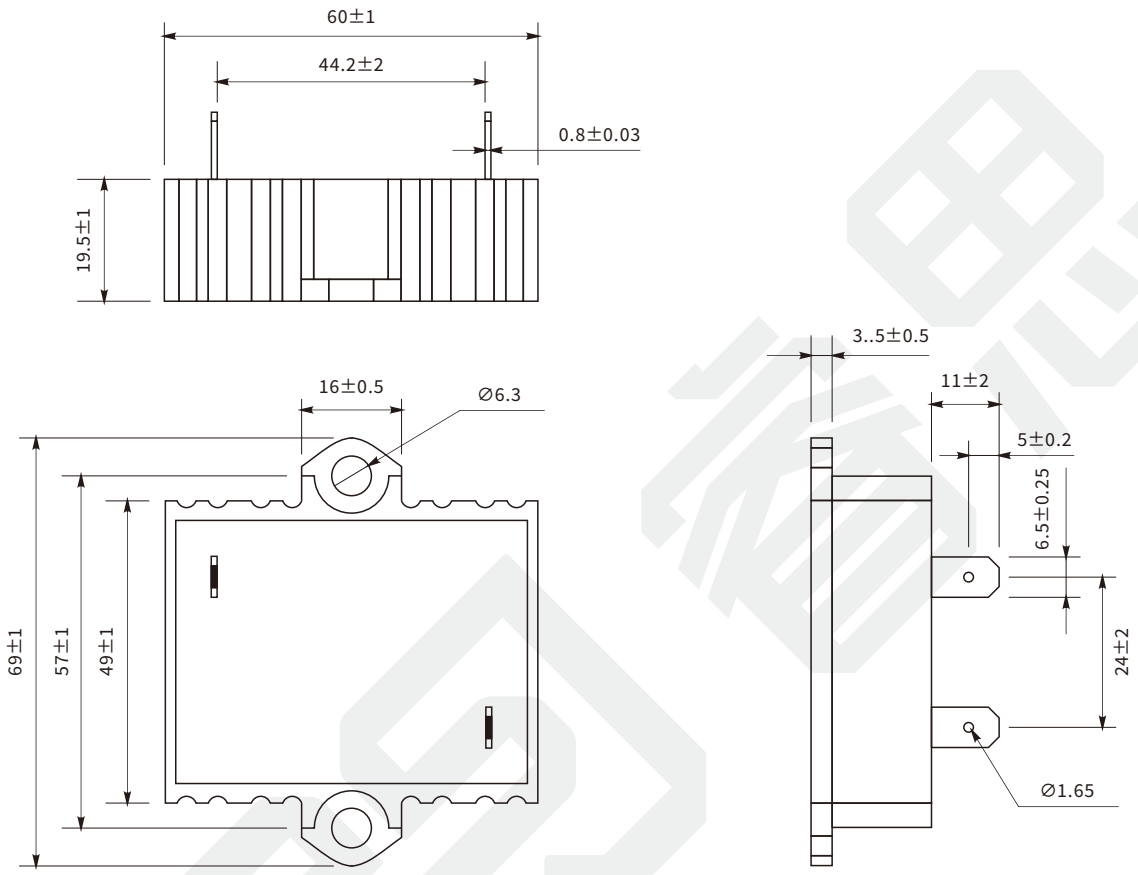
ULVR

High Reliability Pre-charging Resistor

Dimensions

Resistor

Unit:mm

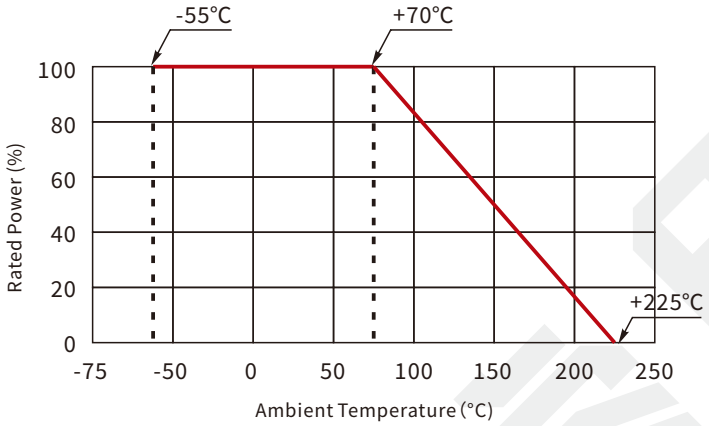


Performance

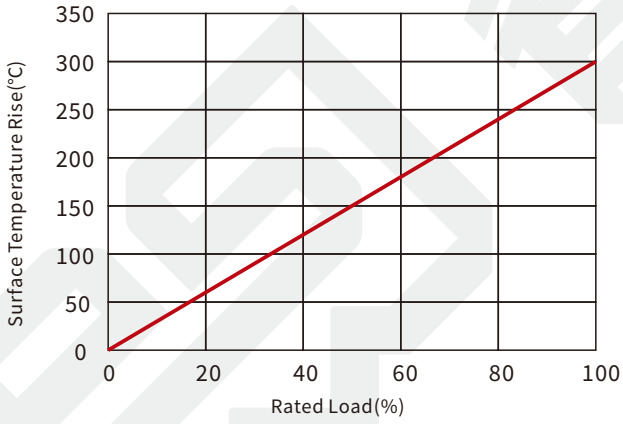
Test	Test Method	Standards	Test Limits
Short Time Overload	10×Rated Power, 5s	JIS C 5201-1 4.13	△R≤±2%
Dielectric Withstanding Voltage	1000Vac, 60s	JIS C 5201-1 4.7	No breakdown or Flashover
Insulation Resistance	500Vdc, 60s	JIS C 5201-1 4.6	10GΩ≤
Solderability	235±5℃, 2s	JIS C 5201-1 4.17	95% minimum coverage
Load Life	70℃, Rated Power, 90min on, 30min off, 1000h	JIS C 5201-1 4.25	△R≤±5%
Moisture Resistance	40℃, 95%RH, 90Min on, 30min off, 1000h	JIS C 5201-1 4.24	△R≤±5%
Temperature Cycling	55℃, 30min~+155℃, 30min, 5 cycles	JIS C 5201-1 4.19	△R≤±1%
Resistance to Soldering Heat	270±5℃, 10s	JIS C 5201-1 4.18	△R≤±1%

C&B Electronics Shenzhen CO., LTD. | www.resistor.today | resi@cbeureka.com | Tel:0755-82899519

Derating Curve



Surface Temperature Rise



C&B Electronics Shenzhen CO., LTD. | www.resistor.today | resi@cbeureka.com | Tel:0755-82899519

Revision

Version	Revised Content	Date	Approver
V0	Initial Issue	2025.6.19	CFD

C&B Electronics Shenzhen CO., LTD. | www.resistor.today | resi@cbeureka.com | Tel:0755-82899519

Disclaimer

All products, datasheets and data can be changed without prior notice.

C&B Electronics Shenzhen CO., LTD., its affiliates, distributors, employees, and any other person acting on its behalf (collectively referred to as "C&B Electronics") shall not bear any legal responsibility for any errors, inaccuracies, or incompleteness of information related to the product disclosed under this agreement or other disclosures.

Product datasheet does not constitute an extension or revision of the purchase terms and conditions in C&B Electronics, including but not limited to the warranties under this agreement.

Unless specified in the purchase terms and conditions, C&B Electronics makes no guarantees, representations or warranties.

To the maximum extent permitted by applicable laws, C&B Electronics hereby makes the following disclaimer:
(1) All liabilities arising from the use of the product;
(2) Including but not limited to all liabilities arising from special, indirect or incidental damages;
(3) All implied warranties, including warranties of suitability for special purposes, non infringement possibility, and marketability.

The information provided in the datasheet and parameter tables may vary in different applications, and the performance of the product may change over time. The recommended application instructions for the product are based on C&B Electronics' understanding and experience of typical requirements. Customers are obligated to verify whether the product is suitable for a specific application based on the parameters provided in the datasheet . Before officially installing or using the product, you should ensure that you have obtained the latest version of relevant information, which can be obtained through the website: resistor.today.

The signing of this agreement does not constitute an express, implied or other form of license related to all intellectual property rights of C&B Electronic Products.

Unless explicitly stated, the products listed in this agreement are not applicable to lifesaving or life sustaining products. In the absence of a clear indication, the customer shall bear all risks caused by unauthorized use of the above products and agree to fully compensate C&B Electronics for all losses caused by such sales or use. For written product terms for such special applications, please contact authorized personnel from C&B Electronics to obtain.

The names and markings on the listed products may be trademarks owned by others.