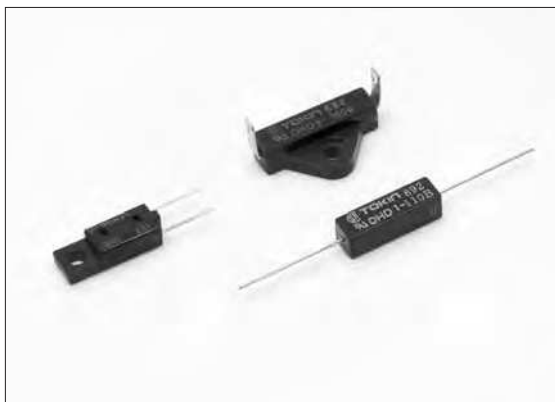


Thermal Guard OHD®



Outline

The thermal guard “OHD®” is developed for thermal problem countermeasures and safety standard conformity that are becoming increasingly important for electronic devices in recent years.

Features

- Extremely simple circuit design (as no adjustment needed).
- Reliable ON-OFF operation (special temperature-sensitive materials and highly-reliable switches give reproducible, reliable ON-OFF action).
- Usable with extremely low (0.1 mW or lower) signals to high power (6 W) levels, making them ideal as built-in overheating detectors in electronic circuits. (OHD5R-OOB have a maximum rating of 1 W.)
- High-speed response (three times higher than previous NEC TOKIN products).
- Compact, light and easy to handle.
- Dust-proof, explosion-proof, and corrosion-proof.
- Wide range of operating temperatures available (in 5 °C increments from 30 to 130 °C)






Applications

- Monitoring overheating of power transistors and power modules in power supplies, OA equipment and other electronic appliances.
- Atmospheric temperature detection and overheating monitoring in room heaters, gas hot water heaters, PPCs, amplifiers, motors, HDDs, FDDs and other general appliances.



- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact NEC TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

Specifications

Product name	Features	Contact shape	Electrical Characteristics	Set operating temperature range*2	Operating temperature precision	Differential temperature
OHD1-  	General-purpose	B:Break M:Make	Maximum opening/closing voltage 110 V AC/DC Maximum opening/closing current 0.3 A AC/DC Maximum opening/closing power 6 W AC/DC Minimum opening/closing current 0.1mA/1V,DC	Fixed in 5°C increments from 30°C to 130°C	±5°C	10°C max.
OHD3-  						
OHD5R- 	Compact radial type	B:Break	Maximum opening/closing voltage 30 V,DC Maximum opening/closing current 0.1 A,DC Maximum opening/closing power 1 W DC Minimum opening/closing current 0.1mA/1V,DC			

UL : E67648
CSA : LR50414
TUV : OHD1-3
OHD5R R 9750955
R 9750944

*1,2 Please consult us before you determine specifications.

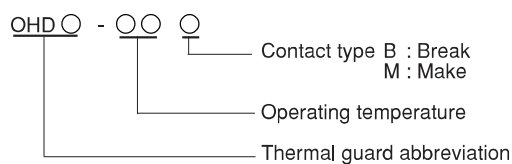
Product name	Contact Resistance	Insulation Withstand Voltage	Insulation Resistance	Remarks
OHD1-B	150mΩ max.	2500VAC/1min. or 3000VAC/1sec (Between terminals and mounting resin surface)	DC500V-100MΩ min. (Between terminals and mounting resin surface)	Compliance to RoHS directive
OHD5R	300mΩ max.	1500VAC/1min. or 1800VAC/1sec (Between terminals and mounting resin surface)	DC500V-100MΩ min. (Between terminals and mounting resin surface)	Compliance to RoHS directive

Standard Temperature Specifications

Product name	Standard temperature specification
OHD1-B	60. 80. 90. 100°C
OHD1-M	70°C
OHD3-B	60. 70. 80. 85. 90. 100. 105. 110. 120°C
OHD3-M	80. 85. 90. 95. 100. 105. 110. 115. 120°C
OHD5R-B	80. 85. 90. 95. 100. 105. 110°C

* Please ask separately except standard temperature specification

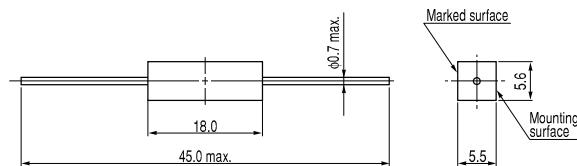
Markings



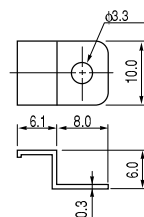
- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact NEC TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

Shape and Dimensions

● OHD1

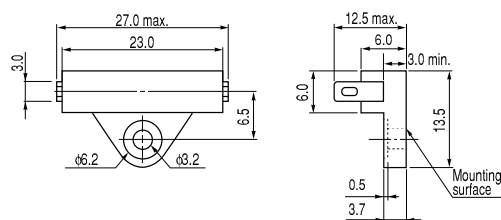


● OHD1 mounting bracket

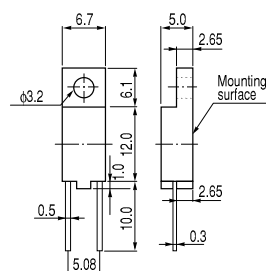


*Mounting brackets exclusively for the OHD1 type are provided optionally (at separate cost).

● OHD3



● OHD5R



(mm)

Before Using Thermal Guard OHD®

- Please ask for a copy of specification and check the contents thoroughly before the actual use.
- Do not use OHD® under mechanical weight load.
- Do NOT use with greater load than specified.
- Do not affix in close proximity to strongly magnetized parts and avoid using in a magnetic field.
- Do not use if dropped or strongly shocked.
- The OHD1 is designed to be inserted into printed circuit boards. OHD3 type is reed wire soldered type.



- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact NEC TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.