



**HBR**  
SERIES  
METAL HOUSED RESISTORS  
POWER ELECTRICAL  
ABSORBS HIGH CURRENT DURING  
BRAKING APPLICATIONS

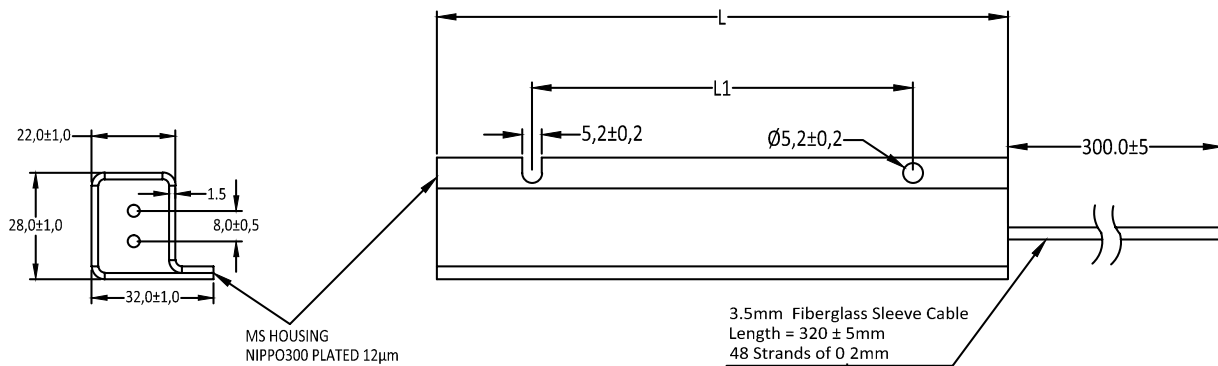
- 100 W to 300 W
- R50 to 390 R
- Customized Solution Available





METAL  
HOUSED  
RESISTORS  
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## PHYSICAL CONFIGURATION



HTR TYPE	POWER RATING AT 25° C		DIMENSIONS (mm)		RESISTANCE RANGE		TYPICAL WEIGHT (gms)
	Without Heatsink	With Heatsink	L±1	L1±1	Min.	Max.	
HBR 100*	100	150	100	50	R50	250R	250
HBR 200*	200	250	150	100	1R0	330R	350
HBR 300*	300	350	200	150	1R0	390R	460

## ELECTRICAL SPECIFICATION

PARAMETER	REQUIREMENTS
<b>Maximum Surface Temperature</b>	350°C
<b>Resistance Tolerance Available</b>	±5% [J], ±10% [K]
<b>Voltage Rating / Limiting Voltage / Max. Working Voltage</b>	$V = \sqrt{P \times R}$
<b>Insulation Resistance (1000vdc)</b>	≥ 9000 MΩ
<b>Short Time Overload (8 X Rated power for 5 sec.)</b>	Max. ΔR ± (2% + R05)
<b>Temperature Co-efficient of Resistance (Typical)</b>	± 150 PPM/°C
<b>Dielectric Strength</b>	5000V rms
<b>Climatic Category</b>	50/200/56
<b>Mounting Instruction</b>	It is recommended to keep a distance of 200mm to the nearest object to prevent heating of a neighboring component.  If two or more brake resistor are mounted next to each other the distance between these should be 400mm. if this is less than the nominal power needs to be de-rated.
<b>Max. Temperature on Cables</b>	90°C
<b>Salt Spray Test (for plating)</b>	150hrs. without any damage
<b>Vibration</b>	Frequency range- 1 – 100Hz Acceleration / Amplitude 1- 13Hz ± 1mm 13 -100Hz @ 0.7G
<b>Temperature Cycling</b>	Max. ΔR ± (2% + R05)
<b>Life (Electrical)</b>	Max. ΔR ± (≤5% + R05)
<b>Pull Test / Robustness of Terminations</b>	2 to 4kg depending on
<b>Absorbed energy in 5" overload</b>	8000 J
<b>Parasitic Capacity from 1 to 100 KHz</b>	400 Picofarad pF

### Typical Applications

Resistors are suitable for application in power electrical circuits (e.g. brake resistors for frequency converters), inverter, snubber, capacitance, discharge.



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**MARKING :**

HTR PART NUMBER	MARKING
HBR100* 1R0 K	HTR LOGO HBR100* 1R0 K DATECODE

**ORDERING INFORMATION :**

SERIES	TYPE	RESISTANCE VALUE	TOLRANCE
HBR	HBR100	2R0	K ( $\pm 10$ )
HBR	HBR200	5R0	K ( $\pm 10$ )

For RoHS version- HBR 100\*