HID Lamp Resistors

# HID Lamp Type

## Metal Film Style [ HTM Series ]
## Carbon Film Style [ HTR Series ]

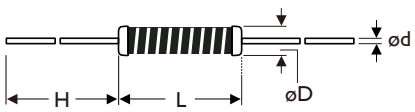
## FEATURES

| | |
|---|---|
| Power Rating | 2W, 2.5W |
| Resistance Tolerance | ±5% |
| T.C.R. | ±250ppm/°C, -500~350ppm/°C |

## INTRODUCTION

The HTM Series Metal Film Resistors are manufactured using a vacuum sputtering system to deposit multiple layers of mixed metal alloys onto a carefully treated high grade ceramic substrate. And the HTR Series Carbon Film Resistors are manufactured by coating a homogeneous film of pure carbon on high grade ceramic rods. After a helical groove has been cut in the resistive layer, steel copper plated wires are welded to the end-caps. The resistor is not coated. This is a special product for HID lamps, providing high power within a small package and saving space.

## DIMENSIONS




Unit: mm

| STYLE | DIMENSION | | | |
|---|---|---|---|---|
| **Normal** | **L** | **øD** | **H** | **ød** |
| HTR200 | 8.5±0.3 | 3.5±0.2 | 26±2.0 | 0.8±0.05 |
| HTM200 | 8.5±0.3 | 3.5±0.2 | 26±2.0 | 0.8±0.05 |
| HTM250 | 15.5±0.3 | 3.5±0.2 | 33±2.0 | 0.8±0.05 |

Note:

## ELECTRICAL CHARACTERISTICS

| STYLE | HTR200 | HTM200 | HTM250 |
|---|---|---|---|
| Power Rating at 70°C | 2W | | 2.5W |
| Maximum Working Voltage | $\sqrt{PxR}$ | | |
| Resistance Range | 2KΩ - 100KΩ for E24 series value | | |
| Temperature Coefficient | ±250ppm/°C for HTM series, -500~+350ppm/°C for HTR series | | |

Note: Special value is available on request

## ENVIRONMENTAL CHARACTERISTICS

| PERFORMANCE TEST | TEST METHOD | | APPRAISE |
|---|---|---|---|
| Short Time Overload | IEC 60115-1 4.13 | 2.5 times RCWV for 5 Sec. | ±0.25% for HTM series<br>±0.50% for HTR series |
| Temperature Coefficient | IEC 60115-1 4.8 | -55°C to +155°C | By type |
| Robustness of Terminations | IEC 60115-1 4.16 | Direct load for 10 Sec. in the direction of the terminal leads | ≥4kg (39.2N) |
| Periodic-pulse Overload | IEC 60115-1 4.39 | 4 times RCWV 10,000 cycles (1 Sec. on, 25 Sec. off) | ±1.0%+0.05Ω |
| Endurance at 70°C | IEC 60115-1 4.25 | 70±2°C at RCWV for 1,000 Hr. (1.5 Hr. on, 0.5 Hr. off) | ±1.5%+0.05Ω |
| Temperature Cycling | IEC 60115-1 4.19 | -55°C ⇨ Room Temp. ⇨ +155°C ⇨ Room Temp. (5 cycles) | ±0.75%+0.05Ω |

Note: RCWV (Rated Continuous Working Voltage) = $\sqrt{\text{Power Rating} \times \text{Resistance Value}}$ or Max. working voltage listed above, whichever less.