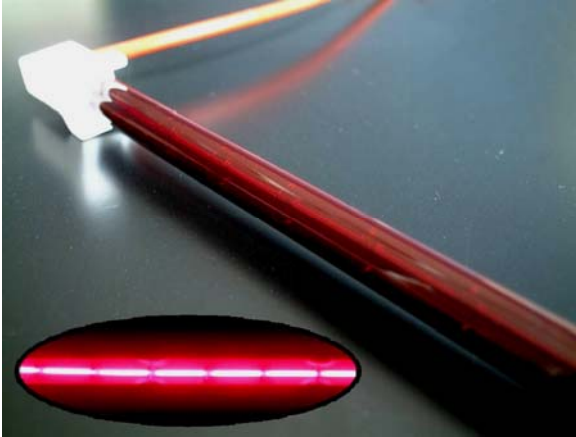
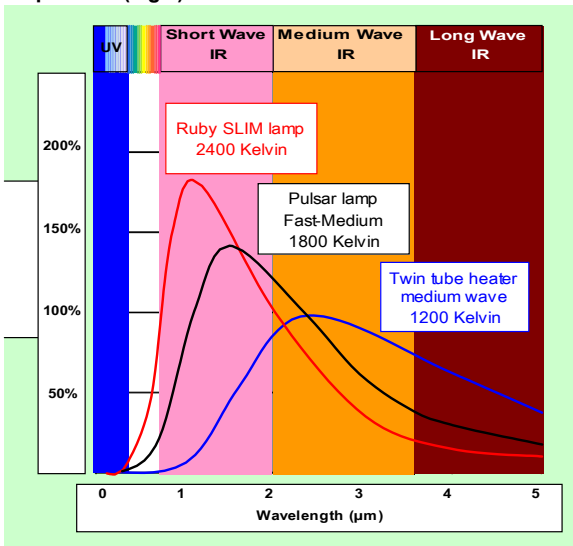


### Infrared Ruby SLIM Lamp

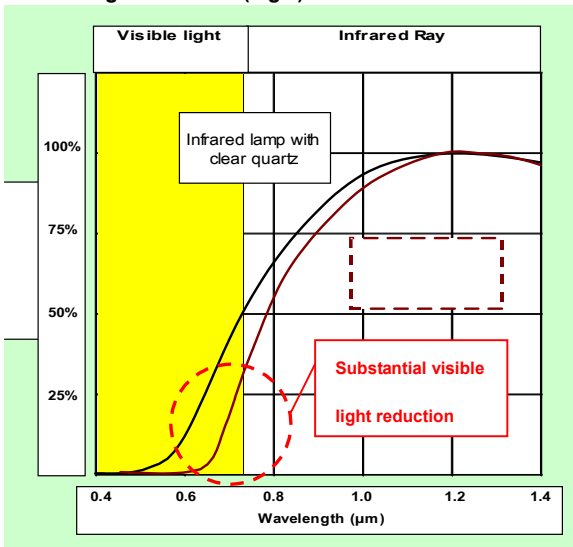


**TOSHIBA** new infrared Ruby SLIM lamps comprise finely coiled tungsten filament surrounded directly by 10mm diameter Ruby quartz tube. Thanks to the narrower diameter (10mm) than that of classical Ruby sleeve (20mm) type, size of your reflector and/or module can be more compactly designed and infrared heat is more efficiently transferred, whilst reducing visible glare (- see Fig 2). As no coating on surface of the glass tube, this lamp brings you no peeling trouble to realize unchangeable low glare over lifetime. TOSHIBA new infrared Ruby SLIM lamp gives benefits of:

Spectrum (Fig.1)



Visible light reduction (Fig.2)



- z Low glare stabilization (No peeling trouble): thanks to the technology without surface coating, low glare can steadily maintain over lifetime.
- z Long life: 5000h on average
- z High speed: within a second to switch on.
- z High efficiency: more than 85% heat efficiency of full power
- z High power density: up to 74 W / cm
- z High controllability: neither ballast nor special circuits are necessary for basic usage.
- z No air draughts: because of radiation (similar to solar energy)
- z Clean and odorless: no risk of contamination over environment or target object to be heated.
- z Extensive assortment: many types of voltage, wattage, length, base, wire-harnesses and universal burning position are available.
- z Flexible: special lamp designing service on demand is available.

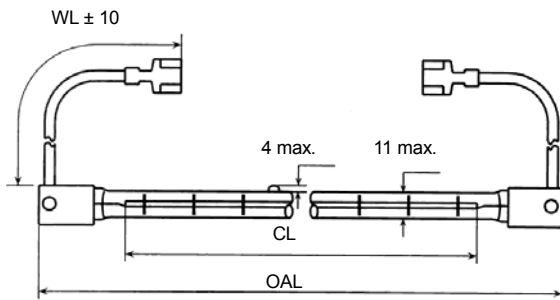
#### Application areas

- Paint drying in body shop
- Breeding animals
- Coil coating
- Outdoor and indoor space heating

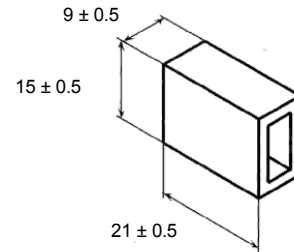
And various kind of industrial heating processes

### Type1

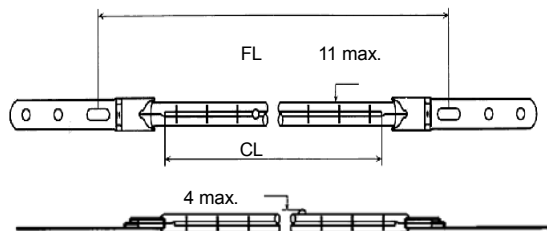
\*Wire harness is protected by insulation tube



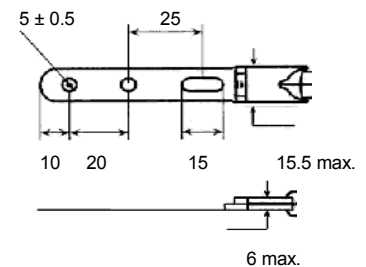
### Base dimensions for Type 1



### Type2



### Metal clip dimensions for Type 2



### Part list

| Part code              | Volts (V) | Watts (W) | Drawing | Wire length WL(mm) | Connection terminal end | Overall length OAL (mm) | Fixation length FL (mm) | Heating length CL (mm) | Burning position | Ave. Life | Ordering code |
|------------------------|-----------|-----------|---------|--------------------|-------------------------|-------------------------|-------------------------|------------------------|------------------|-----------|---------------|
| <b>Standard</b>        |           |           |         |                    |                         |                         |                         |                        |                  |           |               |
| JHQ 235V 1000W 280 BfH | 230 - 240 | 1000      | TYPE1   | 300 ± 10           | Faston                  | 352 ± 2                 | -                       | 280                    | Horizontal       | 5000      | 2JHRQ018      |
| JHQ 235V 1000W 280 JU  | 230 - 240 | 1000      | TYPE2   | -                  | -                       | -                       | 370 ± 10                | 280                    | Universal        | 5000      | EM-380        |
| JHQ 235V 1500W 280 BfH | 230 - 240 | 1500      | TYPE1   | 300 ± 10           | Faston                  | 352 ± 2                 | -                       | 280                    | Horizontal       | 5000      | 2JHRQ019      |
| JHQ 235V 2000W 280 BfH | 230 - 240 | 2000      | TYPE1   | 300 ± 10           | Faston                  | 352 ± 2                 | -                       | 280                    | Horizontal       | 5000      | EM-491        |
| JHQ 235V 2000W 280 BfU | 230 - 240 | 2000      | TYPE1   | 900 ± 10           | End-stripped            | 352 ± 2                 | -                       | 280                    | Horizontal       | 5000      | EM-316        |
| JHQ 235V 2000W 280 JU2 | 230 - 240 | 2000      | TYPE2   | -                  | -                       | -                       | 370 ± 10                | 280                    | Universal        | 5000      | EM-381        |
| JHQ 400V 2000W 410 JU1 | 230 - 240 | 2000      | TYPE2   | -                  | -                       | -                       | 508 ± 10                | 410                    | Universal        | 5000      | EM-382        |
| JHQ 400V 3000W 700 JU  | 230 - 240 | 3000      | TYPE2   | -                  | -                       | -                       | 798 ± 10                | 700                    | Universal        | 5000      | EM-383        |
| <b>Ultra low glare</b> |           |           |         |                    |                         |                         |                         |                        |                  |           |               |
| JHR 235V 1000W 280 BfH | 230 - 240 | 1000      | TYPE1   | 300 ± 10           | Faston                  | 352 ± 2                 | -                       | 280                    | Horizontal       | 5000      | JHR001        |
| JHR 235V 1000W 280 JU  | 230 - 240 | 1000      | TYPE2   | -                  | -                       | -                       | 370 ± 10                | 280                    | Universal        | 5000      | JHR002        |
| JHR 235V 1500W 280 BfH | 230 - 240 | 1500      | TYPE1   | 300 ± 10           | Faston                  | 352 ± 2                 | -                       | 280                    | Horizontal       | 5000      | JHR003        |
| JHR 400V 2000W 410 JU1 | 230 - 240 | 2000      | TYPE2   | -                  | -                       | -                       | 508 ± 10                | 410                    | Universal        | 5000      | EM-91         |
| JHR 400V 3000W 700 JU  | 230 - 240 | 3000      | TYPE2   | -                  | -                       | -                       | 798 ± 10                | 700                    | Universal        | 5000      | JHR004        |