

## ● Features

- We develop leading edge technologies such as hard glass, unique mercury enclosing method, hard outer lead, and cup electrode, and our CCFL is now the de facto standard of CCFL industry.
- Various diameters ( $\phi 1.8-4.0$  mm) and lengths (150-1,300 mm) are available for selection.
- By changing phosphor, the color temperature matching each LCD system can be set (4,500K-20,000K).
- Our electrode is low power consumption type at low lamp voltage by the hollow effect of the cup electrode.
- By adopting the cup electrode, longer product life is realized.
- Since the sealed part is closely adhered to the tungsten wire with the compression seal of hard glass, there is no slow leak by heat stress etc. (see the expansion curve of hard glass and tungsten.)
- Our hard glass is excellent in the UV cut effect. Please refer to the Comparison of UV Emissions on page 8. In addition, UV cut glass is also available. Please contact our office.
- By our unique mercury enclosing method, the amount of enclosed mercury can be stabilized, and also adjusted as requested.
- Lighting start voltage, emission efficiency, service life, heat dissipation, lamp voltage, etc. can be selected by the ratio of neon argon mixture gas, enclosure pressure, and type of electrode.
- By our unique phosphor coating method, equalization of a luminance distribution in the lamp axial direction and low luminance degradation are realized. The product with the improved luminance distribution for direct backlight system is also available. Please contact our office.
- The darkness starting characteristic is improved by our unique method. For this reason, since our lamp has polarity, be careful of wire connection.
- By using niobium (Nb) material with the low sputtering rate for the cup electrode, consumption of the mercury by sputtering can be limited for longer life.

[Example] Sputtering rate by mercury ions ( $Hg^+400eV$ ) = Ni 0.72, Nb 0.34

Due to this effect, short electrode (Nb: 4mm electrode) for Notebook PC and low gas pressure (high luminance and high efficiency) for monitors are achieved.

The expansion curve of hard glass and tungsten

