

## DENKA LaB<sub>6</sub> cathode Model 3

Sep. 3, 2001 Rev 2: May. 9, 2002

### Range of uses

- Electron microscope (SEM, TEM)
- Electron Probe Micro Analyzer
- Scanning Auger Spectrograph and other micro electron beam applications

### Grade

- JEOL base type : Model 3 LKS (for SEM/TEM)  
: Model 3 LKSH (for TEM)
- LEO base type (Leica / Cambridge): Model 3 CA  
(Carl Zeiss) : Model 3 Z2
- Philips/Amray base type : Model 3 KF\*

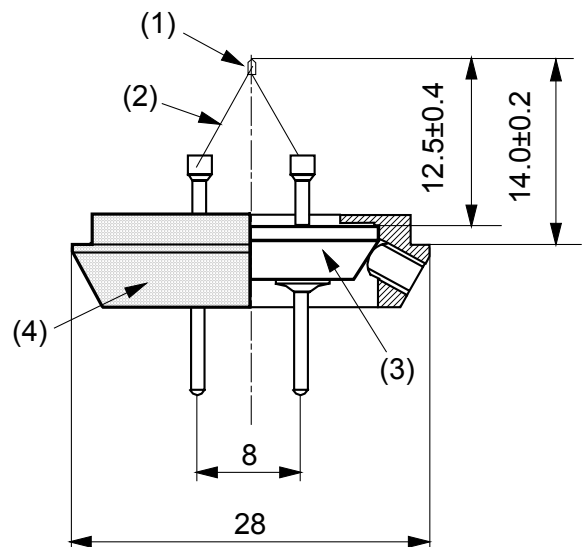
(\*Model 3 PH and Model 3 AM were merged into a single grade)

### Technical data

- Operating temperature:  $\leq 1600^{\circ}\text{C}$ . Operation  $\leq 1550^{\circ}\text{C}$  strongly recommended.
- Operating pressure:  $\leq 2.7 \times 10^{-4} \text{Pa}$  ( $2 \times 10^{-6} \text{Torr}$ ).  
Operation  $\leq 2.7 \times 10^{-5} \text{Pa}$  ( $2 \times 10^{-7} \text{Torr}$ ) strongly recommended.
- Heating electrical power : Power consumption  $\leq 8.0 \text{W}$  at  $1550^{\circ}\text{C}$
- Typical life : 500-2,000hr (depending on operating condition and circumstance)
- LaB<sub>6</sub> tip shape :  $90^{\circ} 15 \mu\text{mR}$  (standard type)  
 $90^{\circ} 20 \mu\text{m}\phi$  (long lifetime)

### Drawing

- (1) Chip : LaB<sub>6</sub>
- (2) Filament : Tungsten wire
- (3) Ceramics base : Insulator
- (4) Filament collar : Stainless steel



Model 3 LKS