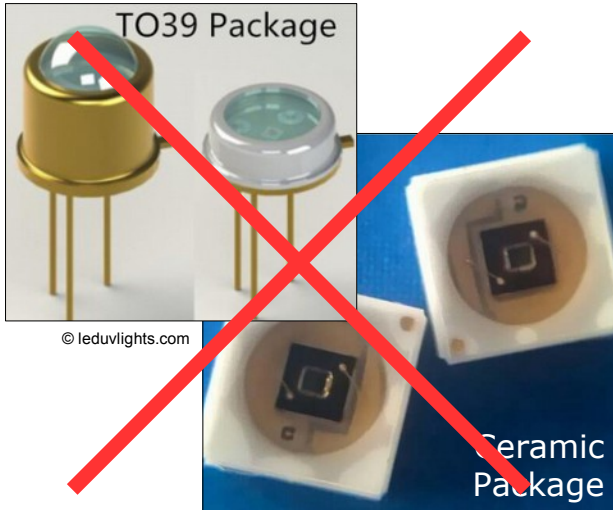
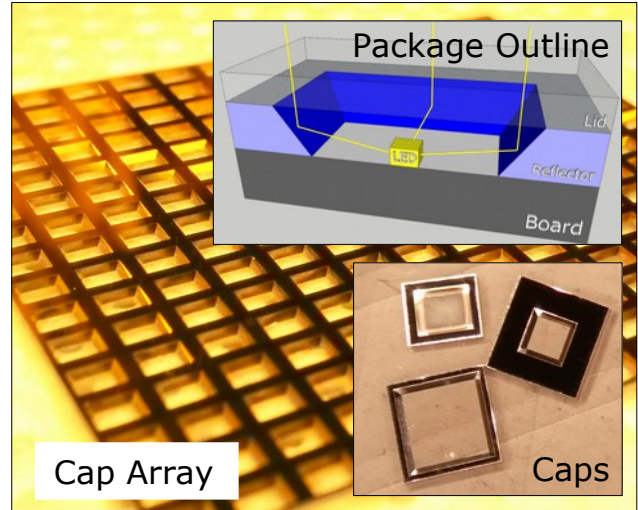


# Maximizing UV-C Light Extraction Efficiency

## Conventional Packages



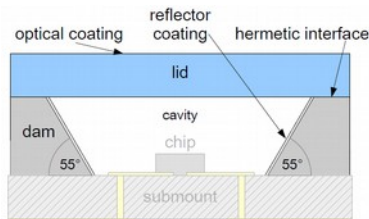
## Lithoglas Package



## Lithoglas® DUV-Caps

- High light output:
  - High transparency for UV-C (fused silica)
  - Al-coated reflector (55°)
  - Anti-reflective coatings on lid
- Hermetic, anorganic materials,
- Bondable to substrate by metallization (Standard: Ni/Au)
- Heat transfer from lid to substrate through silicon sidewall
- Small outline, typical dimensions 3.5 mm x 3.5 mm x 1.2 mm
- Cap arrays with multiple reflectors for compact high power output

### Design Rules:



typ. application: HB-/UV-LED packaging

<i>Lid Material</i>	<i>Fused Silica / optical topside coating</i>
<i>Lid Thickness</i>	$\geq 200 \mu\text{m}, \leq 1100 \mu\text{m}$
<i>Dam Material</i>	<i>Silicon with Aluminum Overcoat</i>
<i>Dam / Cavity Height</i>	$\geq 300 \mu\text{m}, \leq 700 \mu\text{m}$
<i>Min. Dam Width (top)</i>	$\geq 300 \mu\text{m}$
<i>Side Wall Angle of Dam</i>	55°
<i>Window Cavity Size</i>	$\geq 500 \mu\text{m}$
<i>Cavity Shape</i>	<i>square / rectangular</i>
<i>Window Outside Dim.</i>	$\geq 2000 \mu\text{m}$ (Standard: 3.4 mm x 3.4 mm)