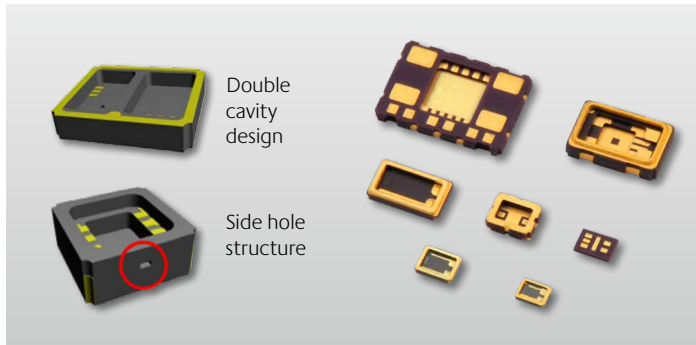


ELECTRONIC PACKAGES CERAMIC PACKAGES FOR GAS SENSOR APPLICATIONS



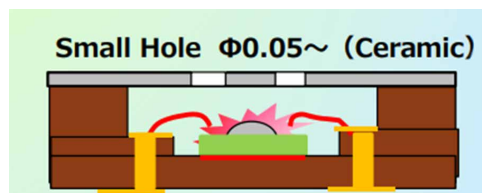
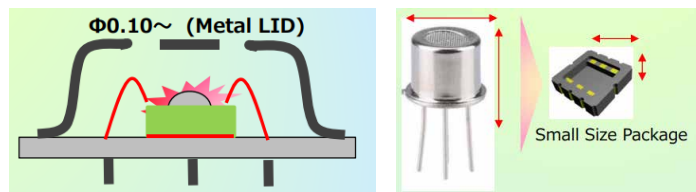
APPLICATIONS

- ▶ Automotive (Smog Emission Sensor, H₂ Leakage Sensor)
- ▶ Mobile Device (Alcohol/Gas Sensor)
- ▶ Gas Alarm for home use
- ▶ Air Cleaner (VOC, Dust sensor)

FEATURES

(IN COMPARISON TO METAL PACKAGES)

- ▶ Down sizing (outer size, height)
- ▶ Reflow design
- ▶ Small hole design ($\phi 50\mu\text{m}$) → dust resistance
- ▶ Improve corrosion → high humidity resistance



FEATURES

(IN COMPARISON TO ORGANIC PACKAGES)

- ▶ Less outgassing
- ▶ High heat resistance ($-45\text{ }^{\circ}\text{C} - +125\text{ }^{\circ}\text{C}$)
- ▶ Flame resisting material → safe for flammable gas
- ▶ Similar CTE to Silicon
- ▶ Water resistance
- ▶ Unique design available

SURFACE MOUNT TECHNOLOGY (SMD)

- ▶ Smaller and thinner package design
- ▶ Automatic reflow process by SMD
- ▶ Less corrosion, outgas material

