HSON8

The HSON8 package maintains the same footprint area (5 x 6 mm) as the standard SOP8 package. HSON8 features an exposed die pad to enhance thermal performance.

FEATURES

- Al wirebonding
- Full turnkey available from wafer saw through test and packing
- Green materials: Pb-free plating & halogen-free mold compound
- Plating coverage at the tip of the lead is more than 50% of leadframe thickness

UNDER DEVELOPMENT

- Environmentally friendly die attach Pb-free solder

PROCESS HIGHLIGHTS

- Interconnect: φ125 µm ~ φ300 µm Al wire
- Plating: 100% Matte Sn
- Marking: Laser mark

Applications

The HSON8 is suitable for medium-power applications (reference values 80W*/60A), designed for low on-resistance and high-speed switching MOSFETs. Ideal for:

- Motor drivers
- Injection drivers
- Power supply circuits
- Lamp drivers
- Automotive products

*Tc = 25°C, Tj = Max 150°C

Reliability Qualification

Amkor packages are assembled with proven reliable semiconductor materials. All reliability testing includes:

- JEDEC standard pre-conditioning except high temperature storage
- 85°C/85% RH, 168 hours, IR reflow 260°C 3X
- H^3TRB: 85°C/85% RH, 1000 hours
- uHAST: 130°C/85% RH, 96 hours
- Temp cycle: -55°C to 150°C, 1000 cycles
- High temp storage: 150°C, 1000 hours

Test Services

Amkor offers full turnkey business for all power discrete products with the capability to test various types of power devices including MOSFETs, intelligent power devices, etc.

- Power discrete test capability
  - DC
  - Capacitance *1
  - Rg *1
  - Avalanche test
  - Thermal resistance
- Program conversion
- Electrical failure analysis
- Integrated test, marking, vision inspection and tape & reel services

*1 Sampling test only

HSON8

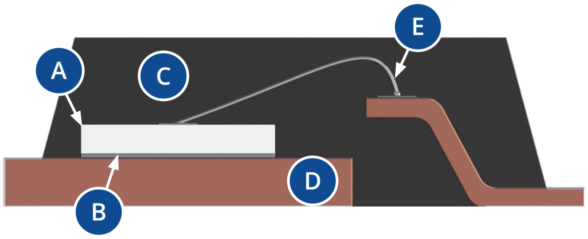
Standard Materials

- Leadframe: Copper with Ni plating on wirebonding area
- Die attach: Pb solder
- Interconnect: Al wire
- Mold compound: Halogen-free

Shipping

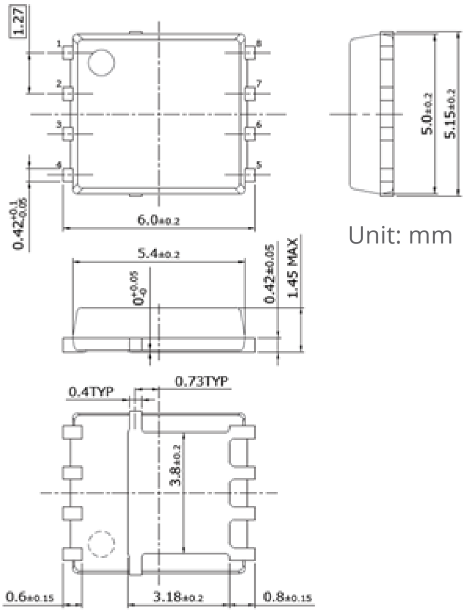
- Tape and reel packing
  - 2500 pcs per reel
  - Tape width: 12 mm
  - Reel Φ = 330 mm
- Barcode packing label

Cross Section



A	Die
B	Die attach material
C	Mold compound
D	Leadframe
E	Al wire

Package Outline Drawing



Unit: mm

Top and Bottom View

Visit amkor.com or email sales@amkor.com for more information.