



Introduction

The PSMC package is part of the FLAT series of compact surface mount packages which allow miniaturization. The Cu clip structure of interconnect features reduces electrical resistance and enhances thermal performance compared to wire-bonded products.

This package may also be known as:

- TO277-A
- SMPC
- CFP15

Application

With both 2 and 3 lead versions available this package is suitable for both high-efficiency diodes as well as transistors:

- Schottky Barrier Diodes (SBDs)
- Rectifier & Zener Diodes
- Transient Voltage Suppressors (TVS)
- MOSFETs

Features

- Cu connector structure to reduce inductance and resistance
- Enhance thermal property
- Turnkey with test and packing services
- Green materials: Pb-free plating & halogen-free mold compound

New Developments

- Larger/higher density leadframe strips
- Environmentally friendly Pb-free solder paste

PSMC

Process Highlights

- Bare copper leadframe with no plating
- Interconnect: Cu clips technology for better electrical and thermal performance
- Plating: 100% matte Sn
- Marking: Pen type laser

Standard Materials

- Leadframe: Bare copper
- Die attach: Solder paste
- Interconnect: Cu clips
- Mold compound: Halogen free

Reliability Qualification

Amkor devices are assembled with proven reliable semiconductor materials.

- All tests include pre-condition of: Ta = 85°C/Rh = 85%, 16 hrs with solder dip, Ta = 265°C, 10s
- Temperature & Humidity Storage, Ta = 85°C/Rh = 85%, 500 hrs
- High Temperature Storage, Ta = 150°C, 500 hrs
- Pressure Cooker, Ta = 121°C/Rh = 100%/P = 2 atm, 144 hrs
- Temperature Cycle, -65~150°C, 300 cycles

Test Service

Amkor offers full turnkey business for all power products. We have the capability to test various type of power devices including MOSFETs, bipolar transistors, IGBTs, diodes, regulator ICs/intelligent power devices, etc.

- Amkor power test capability:
 - Static test (DC)
 - Dynamic test (AC, Switching/Trr, Capacitance/Rg)
 - Destruction test (Inductive load/VSUS, I Latch, Surge, Isolation/VIL)
 - Thermal Resistance (ΔVDS , ΔmV , etc.)
- Program generation/conversion
- Failure analysis
- Available test/handling technology
- Integrated marking, vision inspection and tape & reel services

Shipping

- Tape and reel packing
 - 6000 pcs per reel
 - Tape width 12 mm
 - Reel Φ = 13 in
- Barcode packing label
- Drop ship

Visit Amkor Technology online for locations and to view the most current product information.

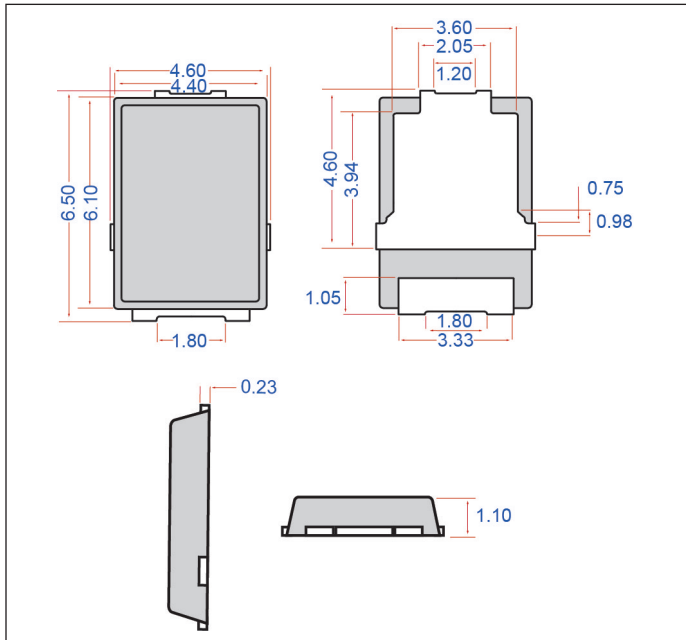


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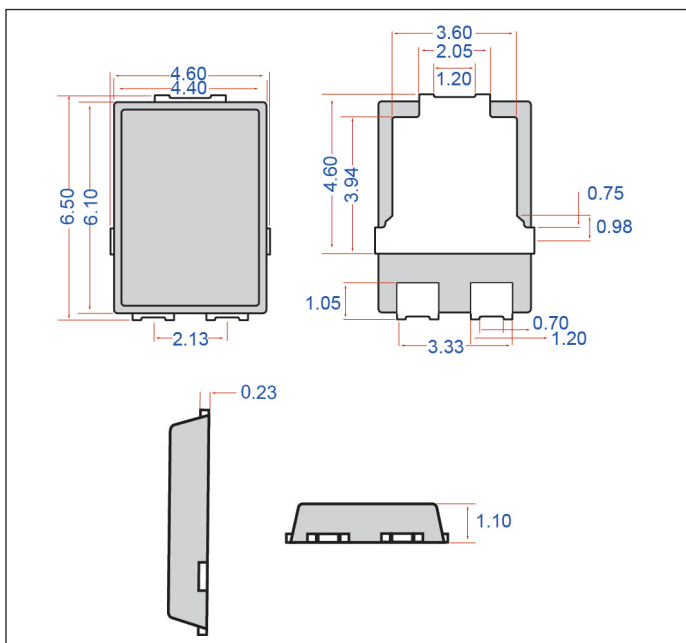
PSMC

Package Outline Drawing PSMC

2 Lead

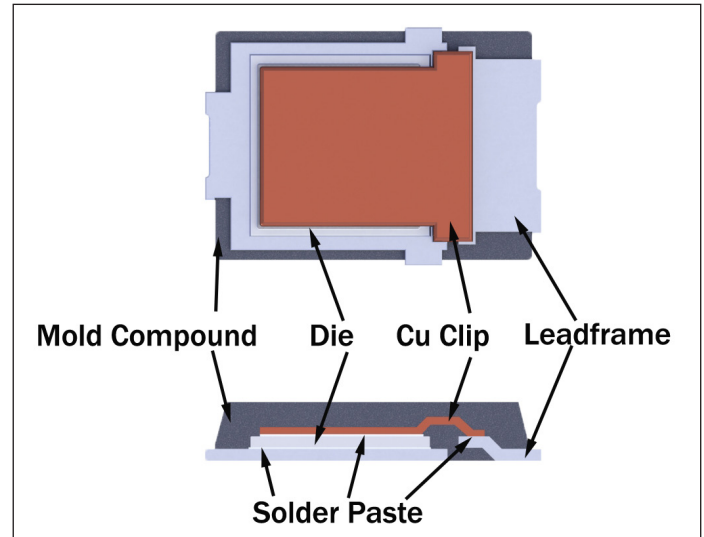


3 Lead

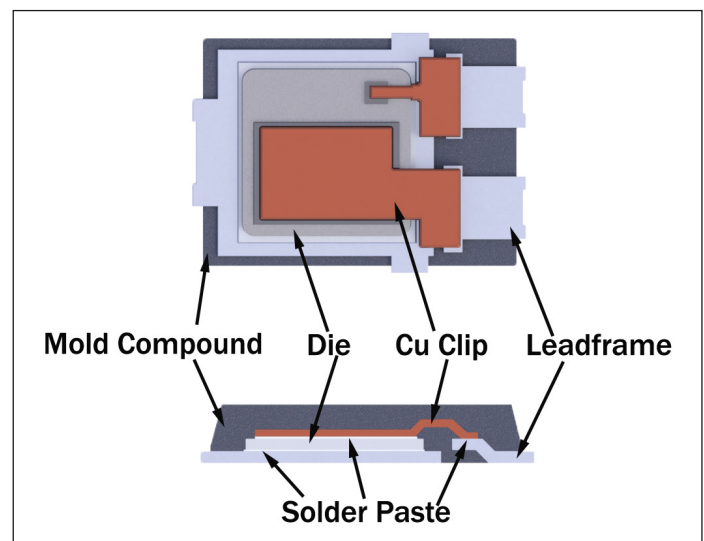


Cross-section PSMC

2 Lead



3 Lead



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