LINGSEN

SC

Single Chip Package

DESCRIPTION

SC is a lead frame based package with gull wing shaped leads on two-side SMT performance characteristics. The package is a thinner version (1.10mm) of the SOT (1.35mm) and pin counts from 3L to 6L leads.

The SC package meets JEDEC Moisture Sensitivity Level 3 standard that ensures reliability in its functions.

SPECIFICATIONS

Die Thickness	228.6um(9mils) maximum
Lead Frame	EFTEC 64T
Gold Wire	99.99% Au
Mold Compound	EME-6300/EME G600 (Green)
Plating	Matte Tin
Marking	Laser
Packing	Tape & Reel

APPLICATIONS

- Voltage Regulator
- Power Amplifiers & Management
- Wireless / RF
- Ultra thin hand-held portable products such as Cell phones, Data Storage Systems, Notebook Computers and Pagers

RELIABILITY

MSL Level	JEDEC Level 3 @ 240°C
Pressure Cook Test	168 hrs (121°C@100%RH, 2atm)
Temperature Cycling	500 cycles (-65°C/150°C)
High Temperature Storage	1,000 hrs (150°C)
HAST	100 hrs (130°C, 85%RH)
Temperature & Humidity Test	1,000 hrs (85°C, 85%RH)

FEATURES

- Available from 3L to 6L
- Lead pitch 0.65 / 1.3mm
- Low package profile
- JEDEC MSL level 3 qualified

PACKAGE AVAILABILITY

Package	Body Size (mm)	Pad Size (mm)	Die Size (mm)	Thermal Performance θja (°C/W)
SC-70 3L	2x1.25	0.9x0.85	0.65x0.5	169.6
SC-70 5L	2x1.25	0.9x0.85	0.65x0.5	159.2
SC-70 6L	2x1.25	0.9x0.85	0.65x0.5	159.2
SC-82 4L	2x1.25	0.9x0.85	0.65x0.65	162.3

Note: Simulated with JEDEC Standard 4-layer test board under still air condition, ambient temperature 45°C

ELECTRICAL PERFORMANCE

Package	Body Size (mm)	Pad Size (mm)	Frequency (MHz)	Self Inductance (nH)	Self Capacitance (pF)	Resistance (mohm)
SC-70 3L	2x1.25	0.9x0.85	100	0.783~0.923	0.233~0.35	46.38~52.17
SC-70 5L	2x1.25	0.9x0.85	100	0.879~0.979	0.205~0.498	52.66~58.52
SC-70 6L	2x1.25	0.9x0.85	100	0.801~1.001	0.214~0.486	46.69~58.65
SC-82 4L	2x1.25	0.8x0.8	100	0.956~1.449	0.473~0.820	59.15~97.33

Note: Results are simulated. Data is available through 2.5GHz.

CROSS-SECTION