

FEATURES

- High thermal conductivity
- Low capacitance
- High insulation resistance

APPLICATIONS

- Power converters
- Power amplifiers
- Filters and synthesizers
- Pin and laser diodes



THERMAL PERFORMANCE



Characterized using FLIR A70 under ambient conditions. The evaluation board is 35 mm x 35 mm 2 layer board with a copper thickness of 35 μ m and total board thickness of 0.8 mm. The device is stressed such that the surface temperature stabilizes at approx. 150 °C with no thermal aid, creating the reference case when pop-

DESCRIPTION

LTG devices from Lotus Microsystems are thermally conductive yet electrically isolated silicon-based thermal jumpers. These devices are designed to guide heat away from hot electronic components, such as between active devices and ground planes, without establishing an electrical connection. LTG devices significantly enhance thermal conductivity, particularly in situations with limited or no direct access to a ground plane or heatsink, such as in a high-side switch in a half-bridge configuration.

Silicon, used as an alternative to traditional ceramic materials in the construction of thermal jumpers, offers a cost-effective solution with high thermal conductivity and excellent thermomechanical properties, and is reliably processed. The incorporation of LTG devices improves circuit reliability and reduces the overall cost of the thermal management system. They are available in three standard EIA sizes (0402, 0603, and 0805) as well as custom sizes.



ulating the LTG devices.



TYPICAL CHARACTERISTICS

| Substrate Material | Silicon (150 W/mK) |
|-----------------------------|----------------------------|
| Termination Material | Copper with/without solder |
| Solder Material | SnAg (1.8%) |
| Operating Temperature Range | -65 °C to +150 °C |
| Storage Temperature Range | -65 °C to +150 °C |

PART NUMBER INFORMATION



Available by Q4 2024 (samples and evaluation boards are ready for shipping).