



Leadless Chip Carrier (LCC) packaging provides tremendous possibilities for reducing the size of microwave switches. In many cases, LCC drivers can be soldered directly to the Duroid™ of the RF switch, reducing hand-wiring to a minimum.

Highly compact microwave switches usually require the use of unpackaged hybrid circuits, to minimize real estate usage. An alternative that can be considered is LCC packaging of drivers. With LCC drivers, it is possible to design switches into tight outlines while having the convenience and simple assembly of a drop-in driver.

LCC drivers can be mounted directly to the Duroid™ of the RF switch, or on a separate driver PC board, in the usual surface-mount manner. Alternatively, they can be mounted inverted on the floor of the chassis, using a suitable epoxy, and wires can be soldered to the LCC pads. In extreme situations, LCC drivers have also been designed into the crevasses between component bodies, with connection to the sides of the package (the solderable crenellations) being made by hand-wiring.

The LCC drivers shown above are printed at actual size. The "TS120A" unit shown is our TS120AL driver, which provides two PIN diode driver outputs of opposite polarity. Switching speed is 30 nanoseconds, and TTL compatibility is assured over the full military temperature range. Output current is internally set, so no external components are needed between the driver and the diode loads.

Many other useful drivers are available in the same package style, including dual-output GaAs MMIC drivers, dual independent 30 nsec PIN drivers (both inverting, both noninverting, or one of each), and single high speed PIN drivers with 5 nanosecond switching speed. In slightly larger LCC packages, we have decoded multi-channel PIN drivers and attenuator linearizers available. In some applications, external power supply bypassing capacitors may be needed.

LCC packages can be hermetically sealed and full MIL screening is available. Many of our standard hybrids can be converted to LCC packaging. Contact the factory for details.

Switch Drivers
Linearizers
Special Assemblies
Sensor Products
Software
Services
Facilities
Press Release
Miscellaneous