METAL SUBSTRATE HAVING AN IC CHIP AND CARRIER MOUNTING

ABSTRACT

A package for mounting an IC chip to a circuit board including a chip carrier (10) which has a metal substrate (12). A dielectric coating (20) is provided on one of the faces. Electrical circuitry is disposed on the dielectric (20) including chip mounting pads (22), connection pads (24) and circuit traces (26) connecting chip mounting pads to connection pads. An IC chip (30) is mounted by flip chip or wire bonding or adhesive connection on the face of the metal substrate. The IC chip is connected to the mounting pads by solder ball or wire bond connections. Electrical leads (36) extend from the connection pads (22) on the chip carrier to corresponding pads (34) on a circuit board to provide I/O signals for the IC chip. Additional heat sinks (62) can be attached to the chip carrier and, chips can be mounted on both sides of the chip carrier to increase the capacity of the chip carrier.

Fig. 1

This Sheet Has Been Replaced



THIS SHEET HAS BEEN REPLACED