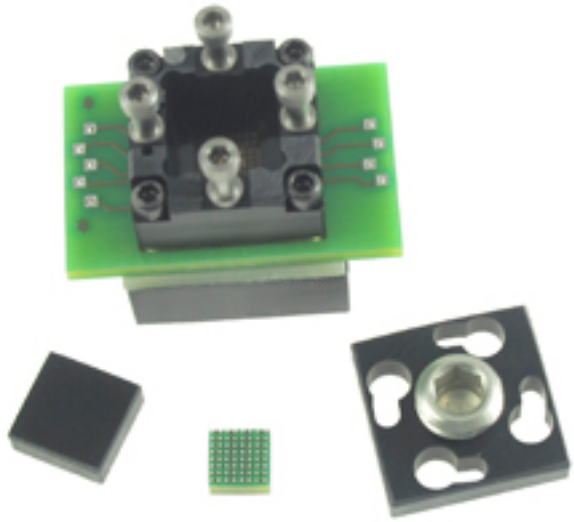
GHz Bandwidth Transceiver Socket for Wafer Level Ball Grid Array



Ironwood Electronics has recently introduced a new high performance BGA socket for 0.5mm pitch 51 pin BGA. The SG-BGA-7154 socket is designed for 4mm x 4mm x 0.8mm package size and operates at bandwidths up to 10 GHz with less than 1dB of insertion loss. The contact resistance is typically 20 milliohms per I/O. The socket connects all pins with 10 GHz bandwidth on all connections. The socket is mounted using supplied hardware on the target PCB with no soldering, and uses smallest footprint in the industry. The smallest footprint allows inductors, resistors and decoupling capacitors to be placed very close to the device for impedance tuning. The socket also incorporates a new quick insertion method so that IC’s can be changed out quickly. The application of the socket is to verify the function of IC in a development system specifically all currently used UMTS (Universal Mobile Telecommunications System) bands with its different regional frequency requirements in Europe, Asia, North America and Japan.

The SG-BGA-7154 sockets are constructed with high performance and low inductance gold plated embedded wire on elastomer as interconnect material between device and PCB. The temperature range is -35C to +100 C. The pin self inductance is 0.15 nH and mutual inductance of 0.025 nH. Capacitance to ground is 0.01 pF. Current capacity is 2 amps per pin.

Pricing for the SG-BGA-7154 is $294 at qty 1; with reduced pricing available depending on quantity required.

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