52 GHz Bandwidth Socket for Kyocera's Optical QFN

Socket your QFN package using elastomer socket with superior electrical performance

EAGAN, MN - July, 2020 - Ironwood Electronics has recently introduced a new high performance low profile elastomer socket for 0.5mm pitch QFN package. The SG25-QFN-2017 socket is designed for a 4mmx4mm package size and operates at bandwidths up to 52 GHz with less than 1dB of insertion loss (GSSG configuration). The contact resistance is typically 20 milliohms per pin. Network analyzer reflection measurements for the G-S-S-G case were taken with all except the pins under consideration terminated into 50 Ohms. The socket is mounted using supplied hardware on the target PCB with no soldering, and uses optimized footprint. The socket utilizes clamshell lid with integrated spring loaded compression plate that applies required force for connecting IC to the system PCB. The socket also incorporates open top with 150 degree view for the optical chip. Overall socket thickness is less than 6mm from PCB which is necessary for optical lens fixture to come close for activating the chip. The socket also has a cutout for placement of thermistor to monitor temperature of the QFN device. The SG25-QFN-2017 sockets are constructed with high performance and low inductance elastomer contactor. The temperature range is -35 °C to +125 °C. The pin self inductance is 0.06 nH and mutual inductance of 0.019 nH. Capacitance to ground is 0.129 pF and mutual capacitance is 0.017pF. Current capacity is 2 amps per pin.

(July 2020)