Mono and Stereo Plug with Captured Nut – *Case Study*

Overview: A customer was building a hand-held Pulse Oxygen meter. He needed a 3.5mm plug to mold onto his cable assembly for the meter.

Challenge: The jack on the meter had a threaded bushing and the customer wanted a plug with a captured nut so that the plug and cable assembly could be attached securely to the meter.

Solution: ISL Products designed and manufactured a plug with a captured nut made to mate with the customer's jack and thread to the customer's device. The plug has a strain relief to secure the wire to the plug after soldering. It also has a Teflon inner sleeve to insulate the center pin of the plug's tip from the sleeve. The Teflon was used to withstand the high heat of the soldering process and the heat from the over-molding process. A more commonly used material like PVC or PE would melt and cause the plug to malfunction.