

COPPERHEAD®

by  exatron

*A PRODUCTION
TEST SOCKET
SPECIFICALLY DESIGNED
FOR EXCEPTIONAL
THERMAL PERFORMANCE*



With its solid copper socket top, Exatron's Copperhead thermal test socket significantly reduces calibration deltas, cuts typical soak times in half, increases temperature stability, and allows for higher wattage control than traditional sockets.

The exact same socket can be used with all Exatron test solutions, from benchtop hand test to high-volume automated handlers.



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REDUCE THERMAL LOSS DURING TEST

Using an Exatron Model 900 Series thermal test handler, devices were tested in a competitor's sockets and in Exatron Copperheads.

*Same package. Same tester. Same conditions.
Different sockets.*

The Copperhead routinely outperformed the competitor in thermal loss and calibration deltas.



Model 903 Thermal Test System



Actual Test Temperatures - QFN with Embedded Thermocouple

COMPETITOR

DUT Temp °C	Head Temp	Δ
+155	166	11.5°
+80	85	5.95°
+68	74	5.6°
0	-5	5.73°
-20	-29	9.95°
-40	-55	15.4°
-55	-80	26.03°

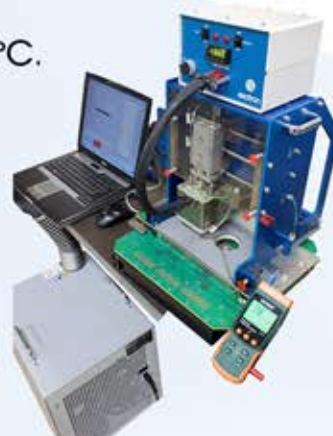
EXATRON

DUT Temp °C	Head Temp	Δ
+155	157	1.2°
+80	82	0.48°
+68	70	0.68°
0	-1	0.18°
-20	-23	4.2°
-40	-46	6.75°
-55	-64	9.8°

INCREASE TEMPERATURE STABILITY

Devices were tested at five different temperatures for four hours each on an Exatron PET-5C equipped with a Copperhead socket and Exatron's Wide Range Thermal Head (WRTH).

Even at the most extreme temperatures, temperature deviation was never greater than 1°C.



PET-5C Test Setup

EXATRON TEMP. DEVIATION

Target Temp °C	Avg Set Temp	Avg WRTH Temp	WRTH Max	WRTH Min
+155	+158	+155.1	+155.2	+154.8
+75	+76.7	+75.4	+75.5	+75.3
-20	-18.4	-19.9	-19.6	-20.2
-55	-57	-54.5	-54.1	-54.9
-75	-77.6	-74.7	-74.4	-75.2

Contact Exatron for more info on WRTH at sales@exatron.com