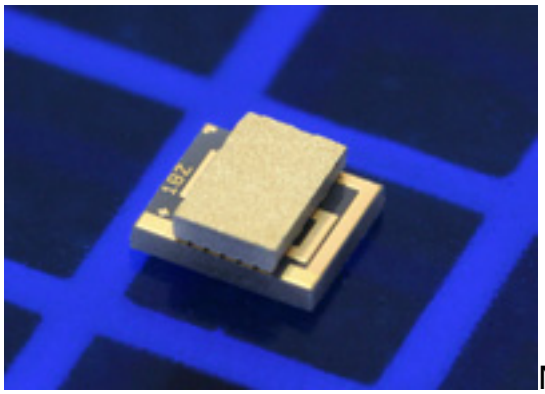
Microscale Heat Pump Enables Pinpoint Thermal Management



Nextreme Thermal Solutions' OptoCooler HV14 high voltage, low current thin-film thermoelectric cooler (TEC) targeted at laser diode cooling for the telecommunications achieves a 60°C temperature difference between its cold and hot sides. This temperature difference, known as the ?T, reflects the ability of the device to pump heat efficiently. The OptoCooler HV14 is the first module in a new class of high voltage and high heat pumping thermoelectric coolers that operate at low currents and are optimized for standard circuitry and power requirements. The device can pump up to 1.5 W of heat at 85°C and operates at a maximum voltage of 2.7 V with a maximum current of around 1A, with a footprint of 2.8mm^2. Due to the micro-size and power-pumping capabilities of the HV14 module, manufacturers of LEDs and other semiconductor chips can now integrate cooling and temperature control functionality directly into the package during assembly, resulting in a high-volume, lower cost thermal management solution. The OptoCooler HV14 is RoHS compliant and is available for order now. Pricing is available upon request.

Nextreme Thermal Solutions
(919) 597-7300; www.nextreme.com/optocooler [1]

Links:
[1] http://www.nextreme.com/optocooler