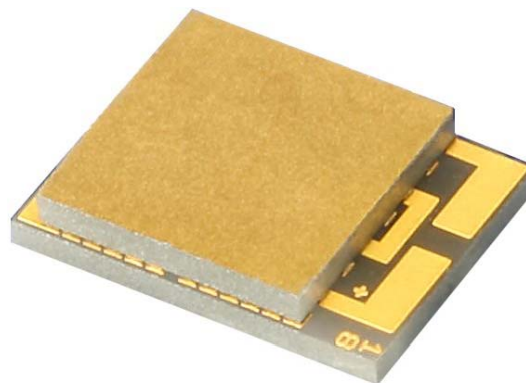


OptoCooler™ HV37 Thermoelectric Cooler

Data Brief

Description

Nextreme Thermal Solutions is developing the next product in its HV line of thin-film thermoelectric coolers to address applications with larger heat pumping requirements. The HV37 can pump 4.5 Watts or 107W/cm² of cooling at 85°C in a footprint of <0.1cm². The HV37 is RoHS compliant and is designed to withstand AuSn assembly processes.



OptoCooler HV37 Data Sheet
Thermoelectric Cooler

Dimensions

	L (mm)	W (mm)
Top Header (Active Area)	2.0	2.1
Bottom Header	2.1	2.9
Module Thickness	0.6mm	

Features

- 3.7 watts maximum cooling at 25°C
- 50K ΔT_{max} at 25°C
- 107W/cm² heat pumping capability
- Small 2.1mm X 2.9mm footprint
- Extremely thin 0.6mm profile
- Au surfaces on top and bottom headers
- RoHS compliant devices

Performance Values (expected)

Hot Side Temperature	25°C	85°C
Q_{max} (Watts)	3.7	4.5
ΔT_{max} (°C)	50	60
I_{max} (Amps)	1.1	1.0
V_{max} (Volts)	5.9	7.7
$R_{electrical}$ (Ω)	4.5	6.1

Assembly Conditions

Time above 290°C	60 sec
Peak Assembly Temperature	325°C

Operating Conditions

Maximum Operating Temp.	150°C
-------------------------	-------

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Nextreme:

[NCA-1003750-0202A_A](#) [NCA-1003750-0202A_W](#)