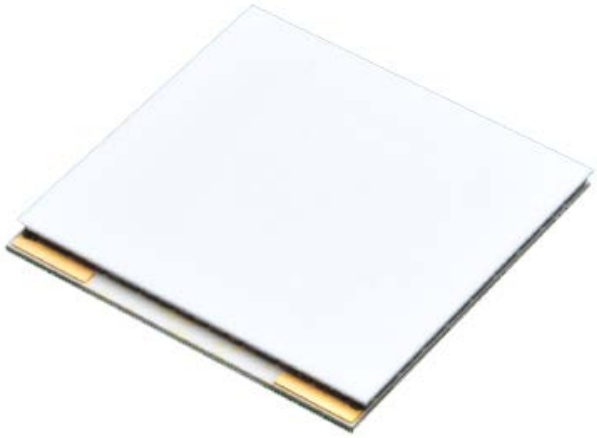
Technical Data Sheet for XLT2393

Single-Stage Thermoelectric Module



NOMINAL PERFORMANCE IN NITROGEN

Hot Side Temperature (°C)	27	50
Δ Tmax (°C):	58	67
Qmax (watts):	187	208
Imax (amps):	13.4	13.3
Vmax (vdc):	21.4	23.7
AC Resistance (ohms):	1.33	---

Performance values account for the heat sink resistance losses through the base ceramic.

PRODUCT FEATURES

- RoHS EU Compliant
- Rated operating temperature of 125°C.
- Ceramic Material: Aluminum Oxide
- Designed for temperature cycling applications.
- Capable of rapid heating and cooling rates.
- Porch configuration for high strength leadwire connection.
- Superior nickel diffusion barriers on elements.
- High strength for rugged environment.
- RTV sealing option available.
- Lapped option available for multiple module applications.
- Diced option for further mechanical stress relief.

ORDERING OPTIONS

Model Number	Description
XLT2393-00L	Lapped
XLT2393-00LS	Lapped, Sealed
XLT2393-01L	Leadwires, Lapped
XLT2393-01LS	Leadwires, Lapped, Sealed
XLT2393-01LD	Leadwires, Lapped, Diced
XLT2393-02LS	Leadwires 6 inch, Lapped, Sealed
XLT2393-05LS	Leadwires 8 inch, Lapped, Sealed
XLT2393-06SD	Leadwires 11”, Lapped, Sealed, Diced, 9 Sections,
XLT2393-07SD	Leadwires 11”, Lapped, Sealed, Diced, 25 Sections
XLT2393-08SD	Leadwires 11”, Lapped, Sealed, Diced, 20 Sections
XLT2393-53SD	Leadwires 4”, Sealed, Diced, 20 Sections, Metalized Base
XLT2393-54SD	Leadwires 11”, Sealed, Diced, 20 Sections, Metalized Base

OPERATION CAUTIONS

For maximum reliability, storage and operation below 125°C in a non-condensing environment is recommended. To minimize thermal stress, use linear/proportional temperature control or a similar method rather than an ON/OFF method.

INSTALLATION

Recommended mounting method: Clamp with uniform pressure to a flat surface with thermal interface material. For additional information, please refer to our TEC Installation Guide.

II-VI Marlow – Dallas, TX USA
214-340-4900
877-627-5691
marlow.sales@ii-vi.com

Marlow Industries Europe
GmbH - Germany
+49 (0) 6150 5439 - 403
info@marlow-europe.eu

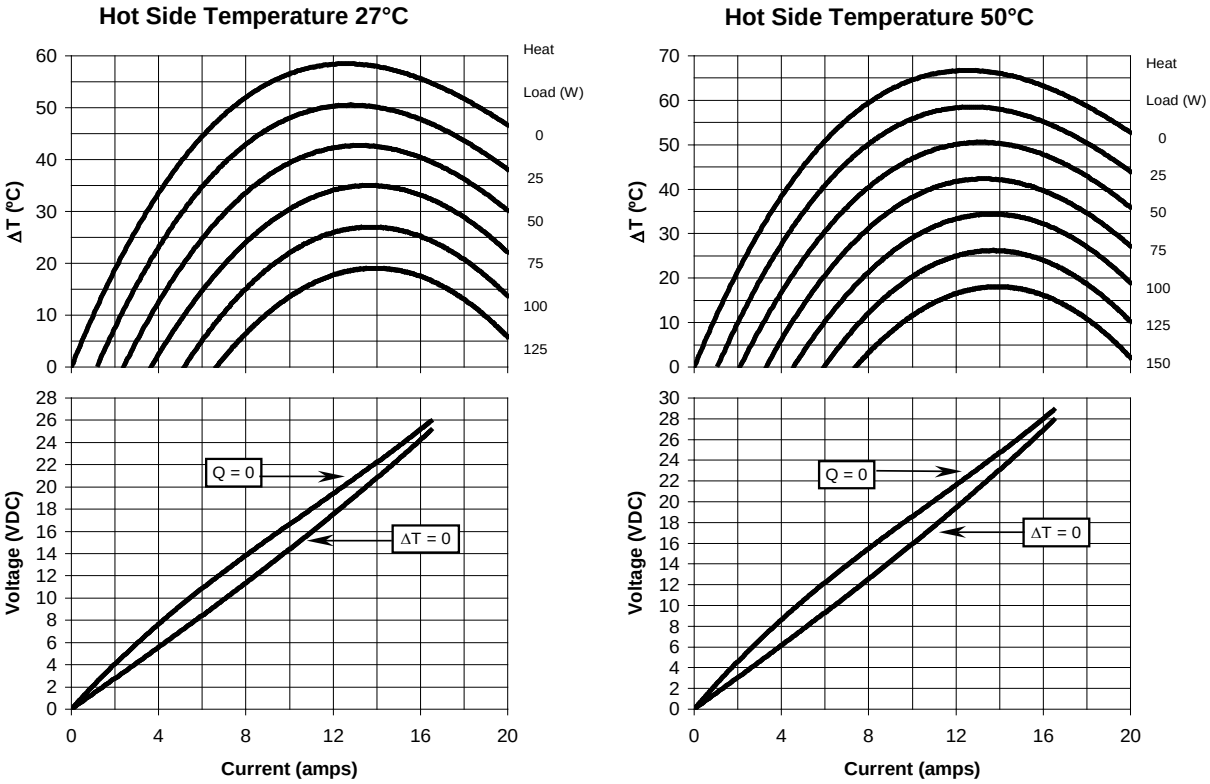
II-VI Japan Inc.
81 43 297 2693 (tel)
center@ii-vi.co.jp
www.ii-vi.co.jp

II-VI Singapore Pte., Ltd.
(65) 6481 8215 (tel)
info@ii-vi.com.sg

Marlow Industries China, II-VI Technologies Beijing
86-10-643 98226
info@iivibj.com

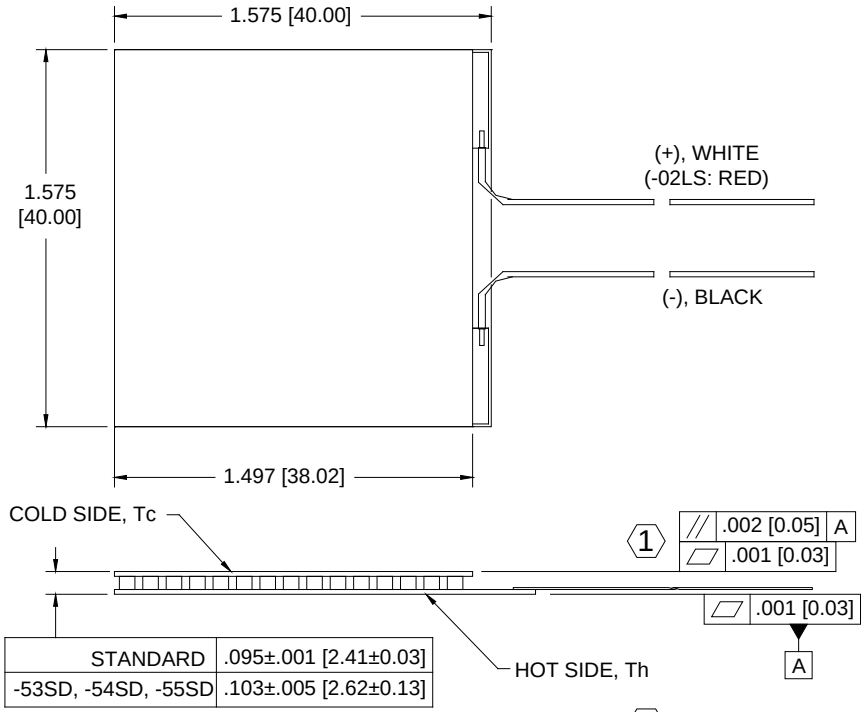
TYPICAL PERFORMANCE CURVES

ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, contact one of our Applications Engineers at 877-627-5691.

MECHANICAL CHARACTERISTICS



STANDARD	.095±.001 [2.41±0.03]
-53SD, -54SD, -55SD	.103±.005 [2.62±0.13]

LEADWIRES:
20 AWG, 19/32 STRANDING.
TEFLON INSULATED
LENGTH: 4.0 ±.5 [101.60±12.70]
6.0 ±.5 [152.40±12.70] (-02LS ONLY)
STRIP LENGTH: .125±.02 [3.18±0.51]
-05LS: LENGTH : 7.87±.5 [200±13]
STRIP LENGTH: .10±.02 [2.5±0.5]
-06SD: LENGTH : 11.0±.5 [279.40±12.70]
STRIP LENGTH: .125±.02 [3.18±0.51]
-07SD: LENGTH : 11.0±.5 [279.40±12.70]
STRIP LENGTH: .125±.02 [3.18±0.51]
-08SD: LENGTH : 11.0±.5 [279.40±12.70]
STRIP LENGTH: .125±.02 [3.18±0.51]
-54SD: LENGTH : 11.0±.5 [279.40±12.70]
STRIP LENGTH: .125±.02 [3.18±0.51]
-55SD: LENGTH : 11.0±.5 [279.40±12.70]
STRIP LENGTH: .125±.02 [3.18±0.51]

1 APPLY TO UN-DICED COOLER ONLY

Dimensions in [ ] are millimeters

For customer support or general questions please contact a local office or visit our website at www.marlow.com.