

REVISIONS			
REV	DESCRIPTION	BY	DATE
B	1. Reduced base thickness from 1.6mm to 1mm 2. Added positioning mask cut-through for Carclo 104 series optics 3. Updated base to Nanotherm® MCPCB technology	RW	Aug 14/18
C	Updated base to Polytronics TCB-8 PCB technology	RW	Nov 20/19

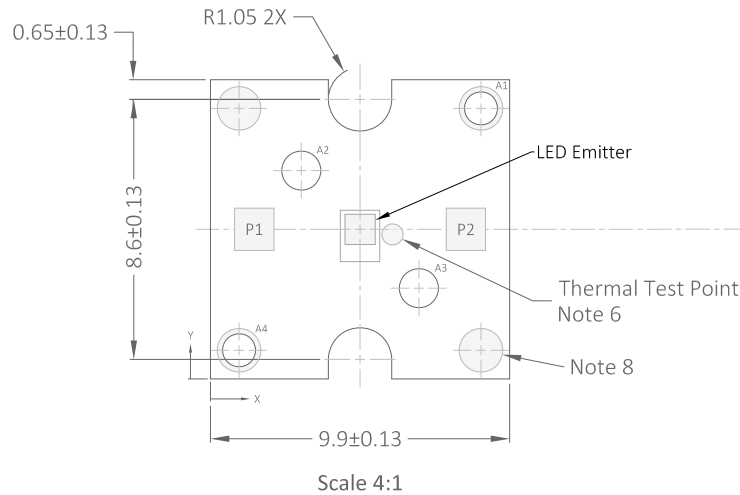


PCB Pads & Markings
Scale 1:1

NOTES:

1. The SABER 2 Z1 is delivered attached to a carrier tab for easy handling during shipping and production. The carrier tab is v-scored so that the LED module can be separated from the carrier.
2. Base is a Polytronics aluminum MCPCB with white soldermask and black markings.
3. Bottom of the base is uncoated and electrically neutral.
4. Solder pads are ENIG plated.
5. LED module must be mounted to a suitable heat sink with a thermally conductive interface material such as our pre-cut thermal adhesive tape. (Part LXT-Z-10)
6. Thermal test point. The test pad is electrically connected to the LED anode. See the datasheet for instructions for determining LED junction temperature.
7. Solder pads are located from the X/Y baseline to the center of the solder pad.
7. 1.5mm openings are cut through the solder mask and copper layers to accommodate positioning of Carclo 104 series optics.
8. The maximum overall height will depend on the mounted LED:

- Blue, Green, Royal Blue & Cyan = 1.99mm
- Red, Red-Orange, Amber & Deep Red = 2.29mm
- Lime & PC Amber = 2.03mm
- IR Compact Line = 2.23mm
- UV = 2.06mm



SABER² Z1
LUXEON® Z LED
For complete specs & app
notes, go to SZ-01.net

SABER² Z1 Carrier Tab - Note 1
Scale 2:1

Hole Table				
Hole ID	X Loc	Y Loc	Dia	Loc Tol
A1	8.95	8.95	1.1±0.05	±0.075
A2	3.00	6.90	1.3±0.05	±0.075
A3	6.90	3.00	1.3±0.05	±0.075
A4	0.95	0.95	1.1±0.05	±0.075

Solder Pad Locations (Note 7)				
Pad ID	X Loc	Y Loc	Rotation	Size
P1	1.5	5.0	0	1.3 x 1.4
P2	8.5	5.0	0	1.3 x 1.4



Connection Schematic

SCALE	As noted	DRAWN	RW	Aug 14/18	SOLDER PASTE	AIM NC-258
UNITS	MM	CHECKED	WW	Aug 14/18	REFLOW PROFILE	Standard
TOLERANCE	As noted	ISSUED		Sept 3/18	QTY PER ARRAY	9

SABER²

QTY	DESCRIPTION
1	SZ-01 Polytronics Aluminum MCPCB
1	LUXEON Z LED
Luxeon Star LEDs service@luxeonstar.com / luxeonstar.com	
PROJECT SABER² Z1 LUXEON Z 10mm Square LED Module	
Quadica Developments Inc.	
PART: SZ-01-XX	REV: C