



TP Series

ACCESSORY THERMAL PADS

DESCRIPTION

The TP series of accessory thermal pads provide an effective method of ensuring a low thermal resistance path, good thermal performance, and excellent isolation between the DC-DC converter and the mounting plane. They are intended to fill air gaps between DC-DC converters and printed circuit boards, heat sinks, or chassis without the use of thermal greases in order to improve heat conduction.

The thermal pads have good thermal conductivity and extremely high conformability. They consist of an extremely soft silicone elastomer loaded with aluminum oxide particles, laminated to a thin thermally conductive reinforcing material which resists puncture and eases handling. They are non-toxic, do not require grease and do not exhibit the cracking problems of ceramic materials. The pads may temporarily react to some cleaning agents by swelling, but are not damaged after the solvent is removed.

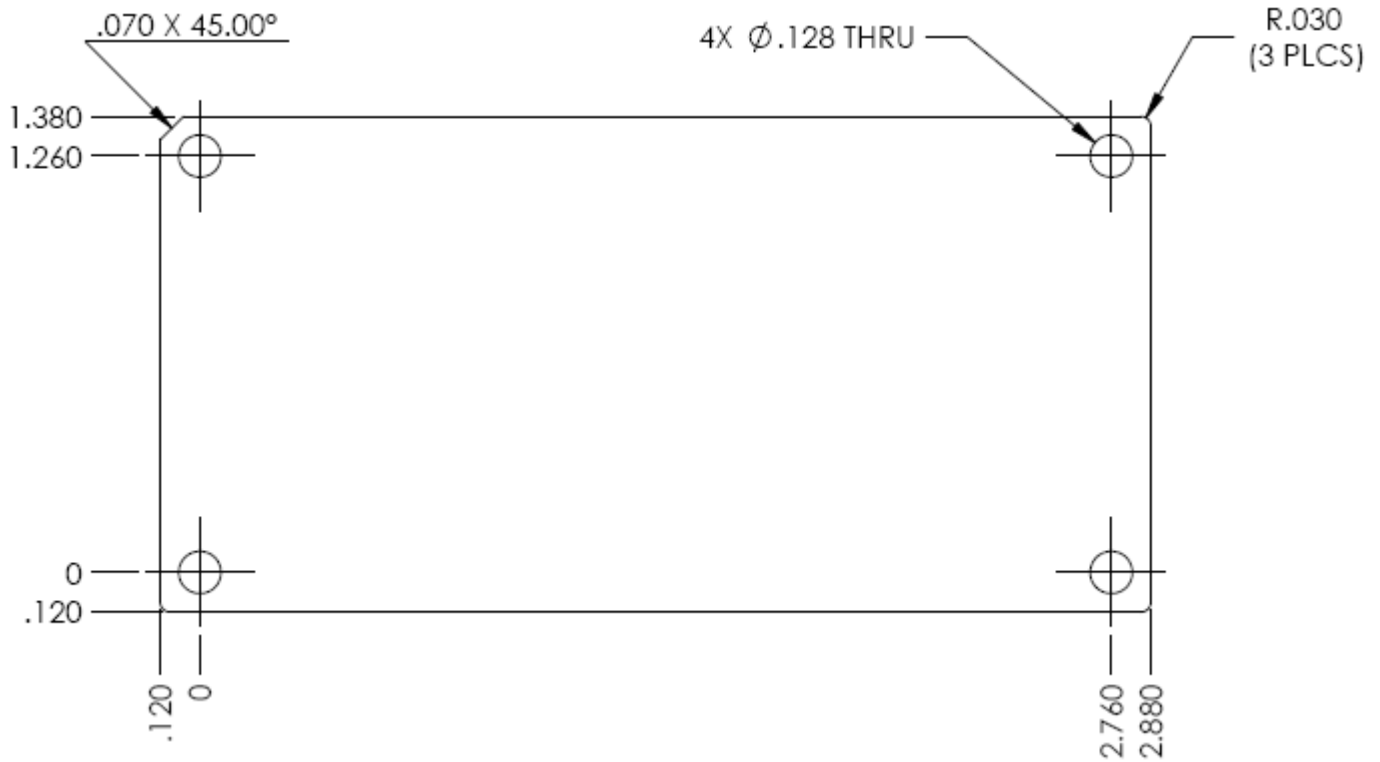
FEATURES

- Thermal Conductivity: 2.6 W/m-K
- Breakdown Voltage: >5 kV
- Temperature Rating: -60°C to 200°C
- Color: Gold
- Specific Gravity: 3.2 g/cc
- Heat Capacity: 1 J/g-K
- Hardness (Shore Type 00): 80
- Dielectric Constant: 7.0
- Volume Resistivity: 10^{10} Ω-m

CROSS REFERENCE

THERMAL PAD	DC-DC CONVERTER SERIES	THERMAL RESISTANCE	FIGURE
TP-001	DVFL2800S, DVFL2800D	0.07°C/W	1
TP-002	DVHF2800S, DVHF2800D	0.16°C/W	2
TP-003	DVTR2800S, DVTR2800D, DVHV2800S, DVHV2800D, DVEHF2800T, DVHE2800S	0.11°C/W	3
TP-004	DVTR2800T, DVETR2800S, DVETR2800D, DVWR2800T	0.11°C/W	4
TP-005	DVSA2800S, DVSA2800D	0.27°C/W	5
TP-006	DV200-2800S, DV200-2800D, DV200-27000S, DV200-27000D	0.06°C/W	6
TP-007	DVHF+2800T, DVSB2800D, DVGF+2800T	0.16°C/W	7
TP-008	VPT5-2800S, VPT5-2800D, VPTF1-28, VHR5-2800S, VHR5-2800D, VHRF1-28	0.25°C/W	8
TP-009	VPT15-2800S, VPT15-2800D, VPTF3-28, VHR15-2800S, VHR15-2800D, VHRF3-28	0.17°C/W	9
TP-010	VPT30-2800S, VPT30-2800D, VPT30-2800T, VPTF10-28, VHR30-2800S, VHR30-2800D, VHR30-2800T, VHRF10-28	0.13°C/W	10
TP-011	VPT100-2800S, VPT100+2800D, VPT100+2800S, VPTF20-28, VPTPCM, VPTHVM, VPTi10, VPTc10, VHR100-2800S, VHR100+2800D, VHR100+2800S, VHRF20-28	0.08°C/W	11
TP-012	VXR7-2800S, VXR7-2800D, VXRF2-28	0.25°C/W	12
TP-013	VXR15-2800S, VXR15-2800D, VXRF5-28	0.19°C/W	13
TP-014	VXR15-2800SM, VXR15-2800DM, VXRF5-28M	0.19°C/W	14
TP-015	VXR30-2800S, VXR30-2800D, VXRF10-28	0.17°C/W	15
TP-016	VXR100-2800S, VXRF20-28	0.08°C/W	16
TP-017	VPT250-2800S, VXR250-2800S	0.05°C/W	17
TP-018	VXR100-2800D	0.07°C/W	18

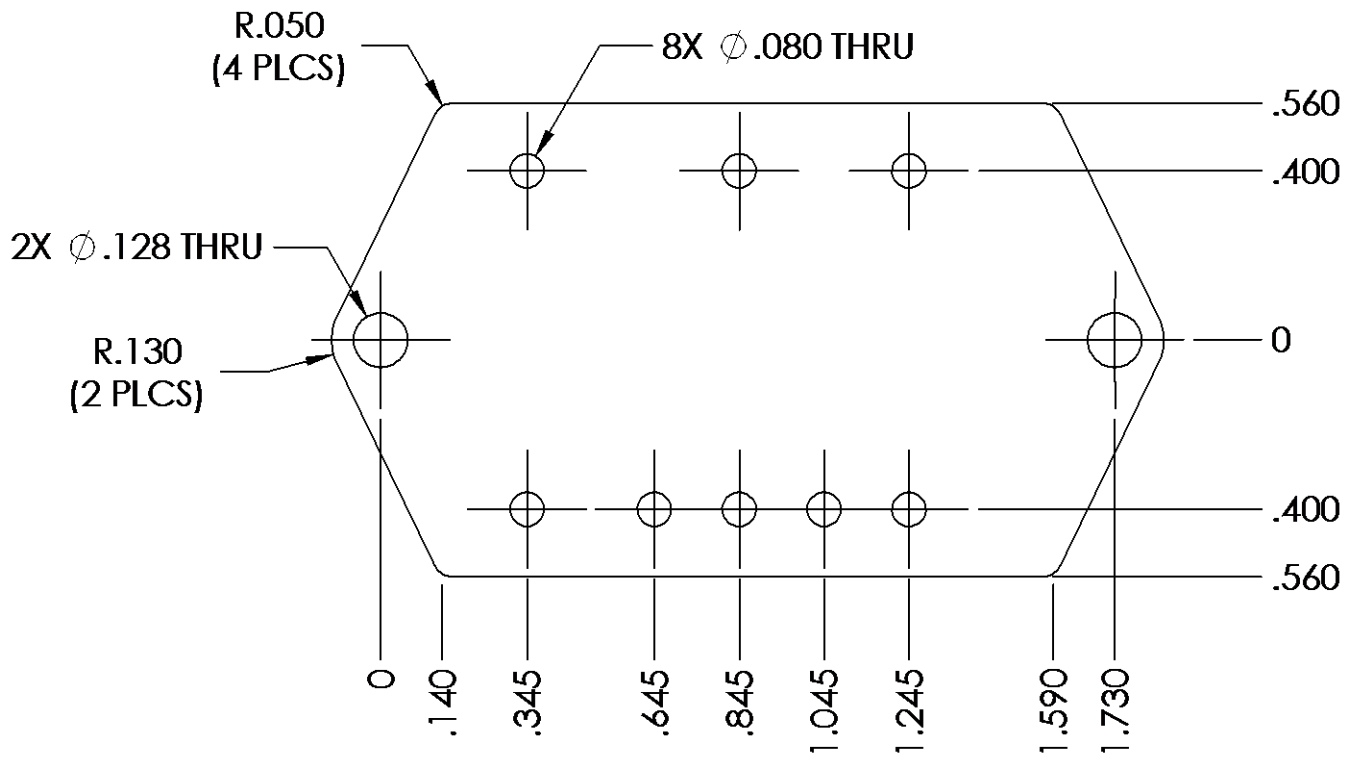
DIMENSIONS (TP-001)



- Note:
1. Dimensions are in inches.
 2. Thickness is $0.020'' \pm 0.002''$.
 3. Dimensional tolerances: $\pm 0.020''$ for hole diameters, $\pm 0.005''$ for hole locations, and $\pm 0.040''$ for all other unspecified dimension tolerances.

Figure 1 – Dimensions (TP-001)

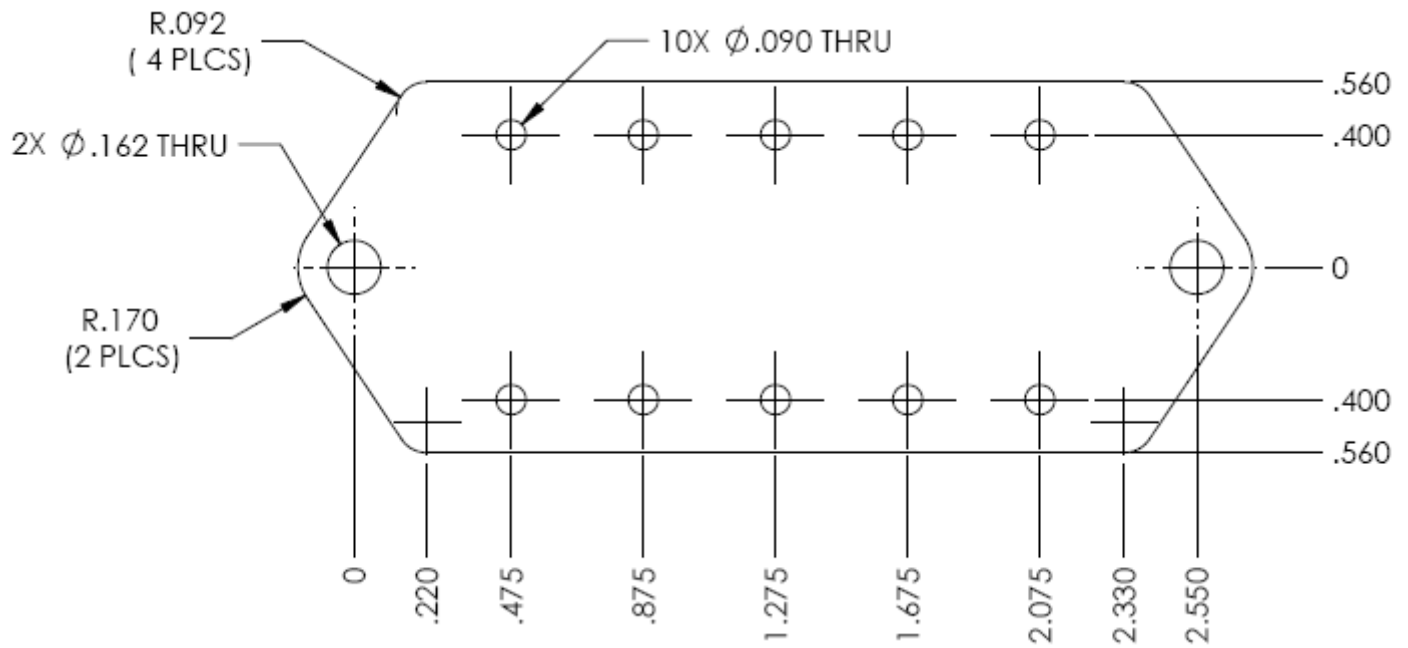
DIMENSIONS (TP-002)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" ± 0.002".
 3. Dimensional tolerances: ± 0.020" for hole diameters, ± 0.005" for hole locations, and ± 0.040" for all other unspecified dimension tolerances.

Figure 2 – Dimensions (TP-002)

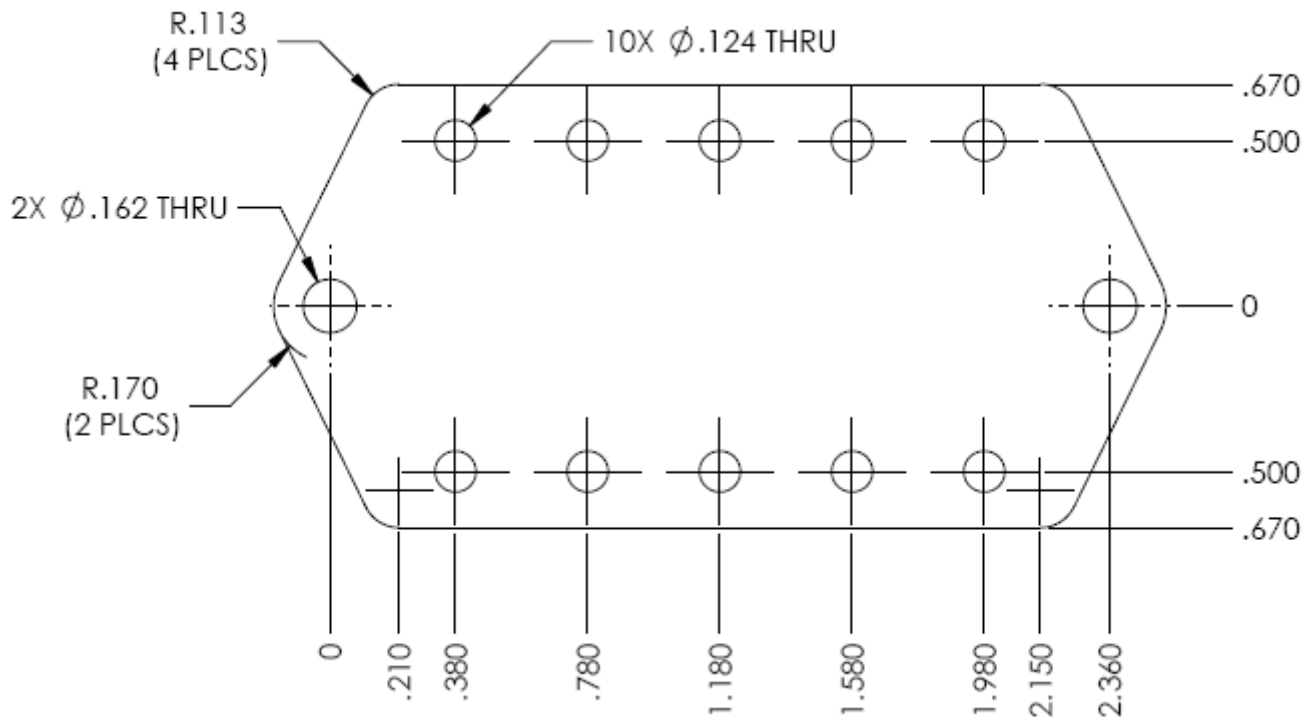
DIMENSIONS (TP-003)



- Note:
1. Dimensions are in inches.
 2. Thickness is $0.020'' \pm 0.002''$.
 3. Dimensional tolerances: $\pm 0.020''$ for hole diameters, $\pm 0.005''$ for hole locations, and $\pm 0.040''$ for all other unspecified dimension tolerances.

Figure 3 – Dimensions (TP-003)

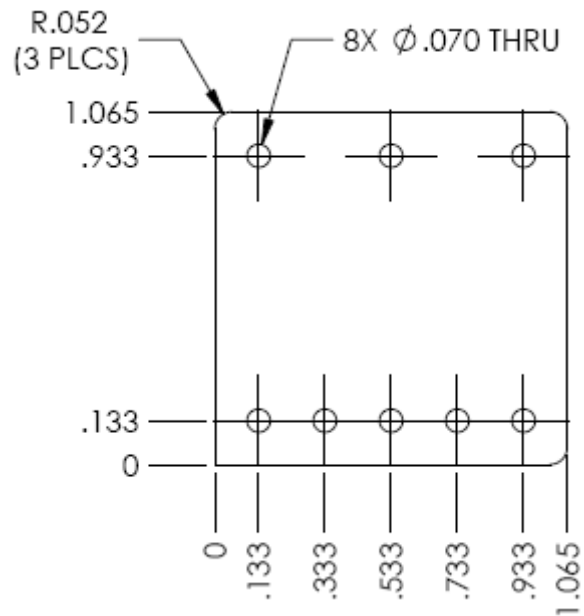
DIMENSIONS (TP-004)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" \pm 0.002".
 3. Dimensional tolerances: \pm 0.020" for hole diameters, \pm 0.005" for hole locations, and \pm 0.040" for all other unspecified dimension tolerances.

Figure 4 – Dimensions (TP-004)

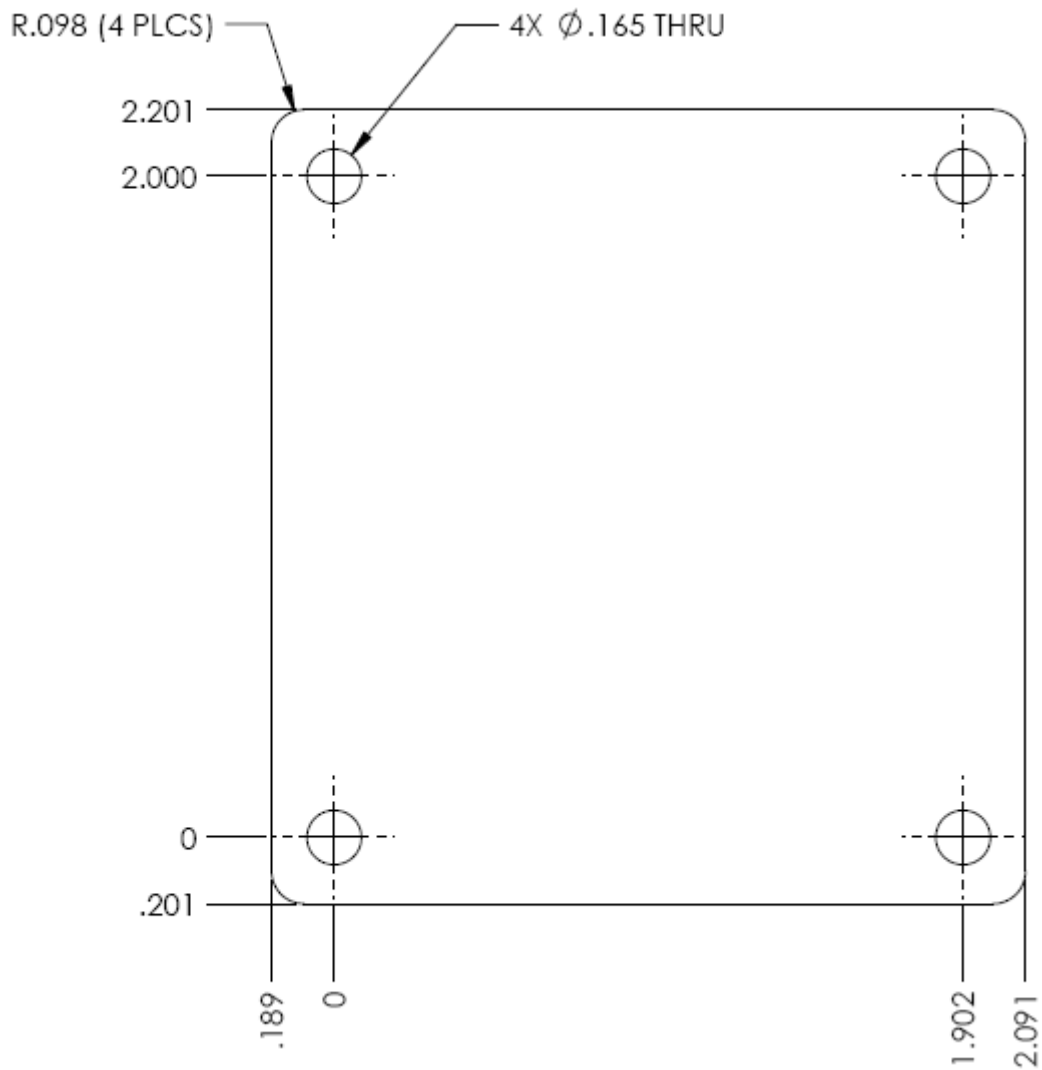
DIMENSIONS (TP-005)



- Note:
1. Dimensions are in inches.
 2. Thickness is $0.020'' \pm 0.002''$.
 3. Dimensional tolerances: $\pm 0.020''$ for hole diameters, $\pm 0.005''$ for hole locations, and $\pm 0.040''$ for all other unspecified dimension tolerances.

Figure 5 – Dimensions (TP-005)

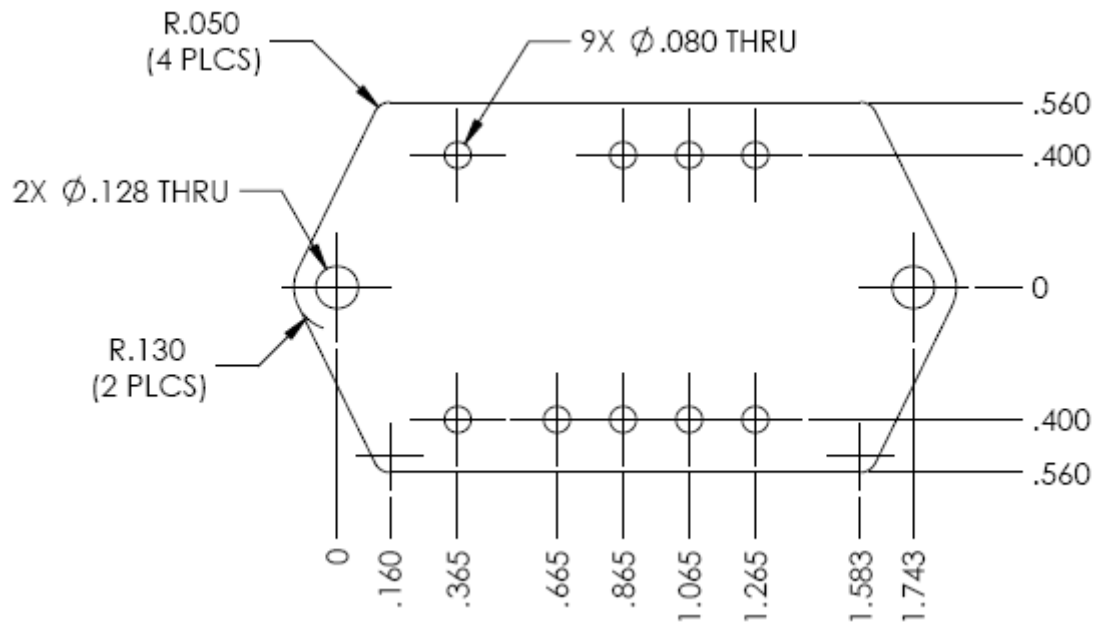
DIMENSIONS (TP-006)



- Note:
1. Dimensions are in inches.
 2. Thickness is $0.020" \pm 0.002"$.
 3. Dimensional tolerances: $\pm 0.020"$ for hole diameters, $\pm 0.005"$ for hole locations, and $\pm 0.040"$ for all other unspecified dimension tolerances.

Figure 6 – Dimensions (TP-006)

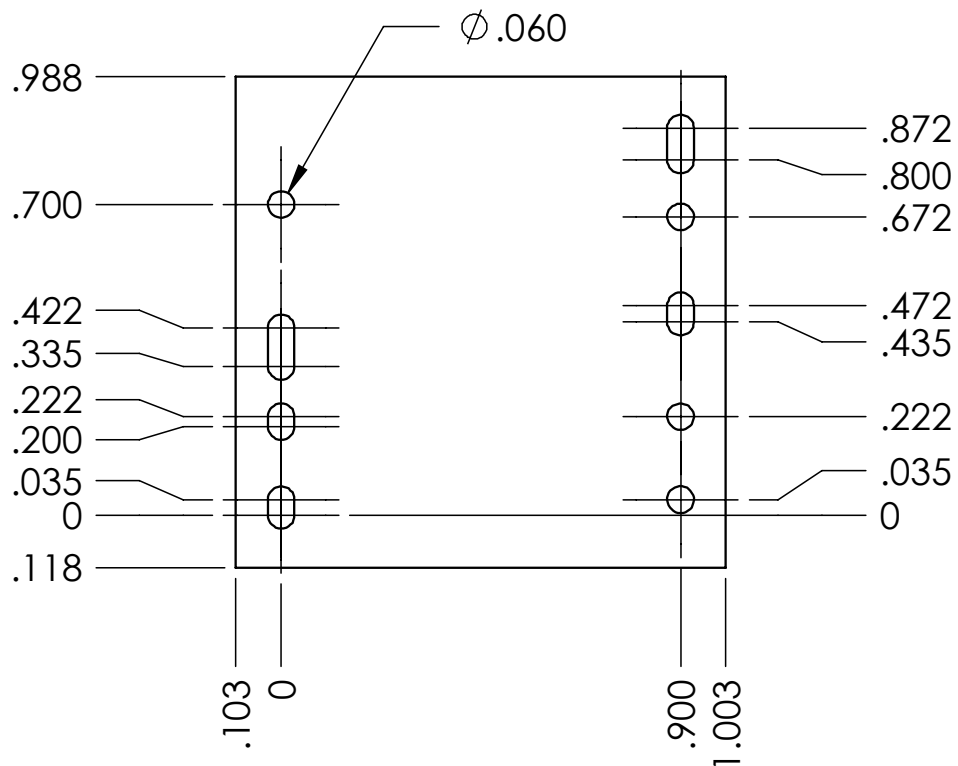
DIMENSIONS (TP-007)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" \pm 0.002".
 3. Dimensional tolerances: \pm 0.020" for hole diameters, \pm 0.005" for hole locations, and \pm 0.040" for all other unspecified dimension tolerances.

Figure 7 – Dimensions (TP-007)

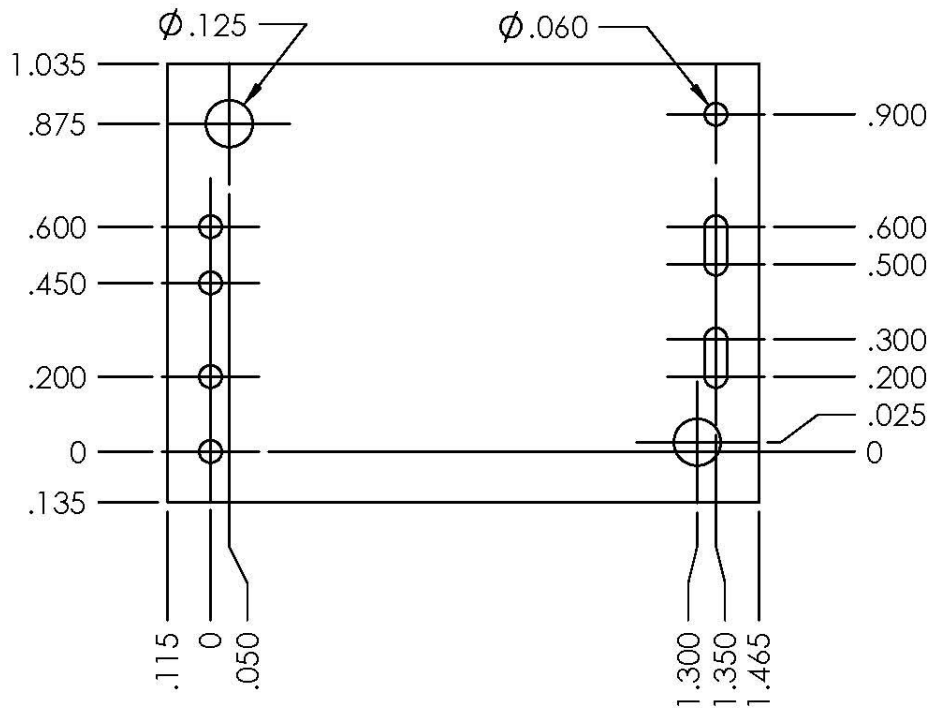
DIMENSIONS (TP-008)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" ± 0.002".
 3. Dimensional tolerances: ± 0.010" for hole diameters, ± 0.005" for hole locations, and ± 0.010" for all other unspecified dimension tolerances.

Figure 8 – Dimensions (TP-008)

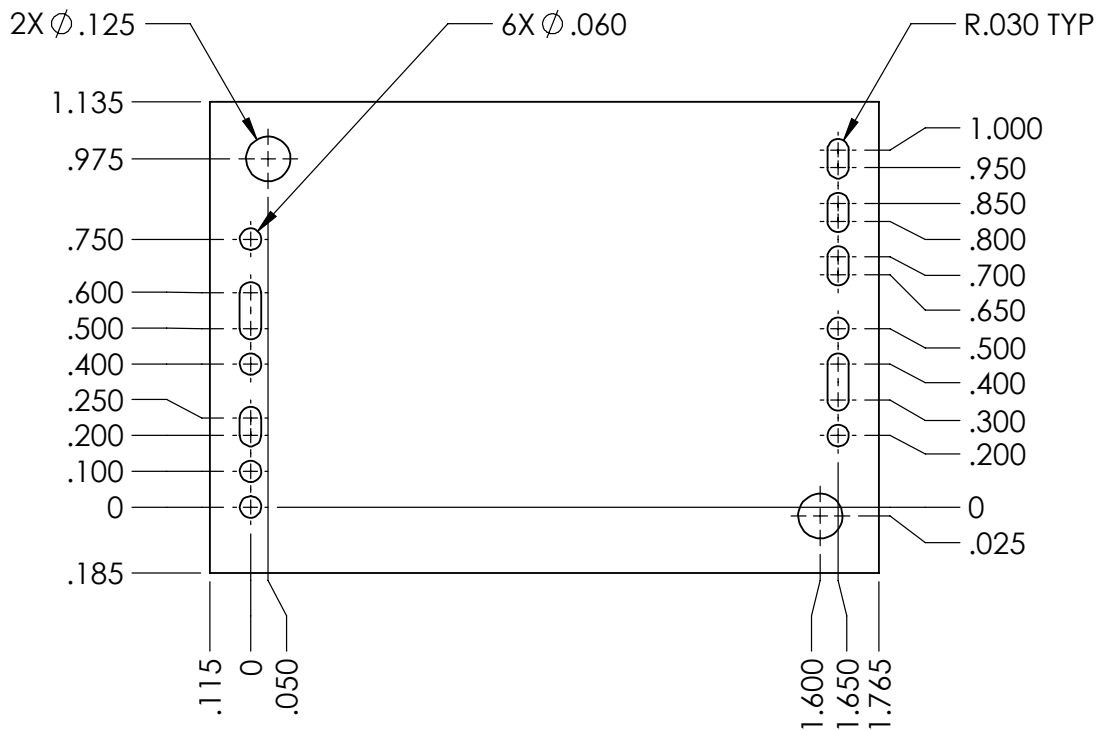
DIMENSIONS (TP-009)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" \pm 0.002".
 3. Dimensional tolerances: \pm 0.010" for hole diameters, \pm 0.005" for hole locations, and \pm 0.010" for all other unspecified dimension tolerances.

Figure 9 – Dimensions (TP-009)

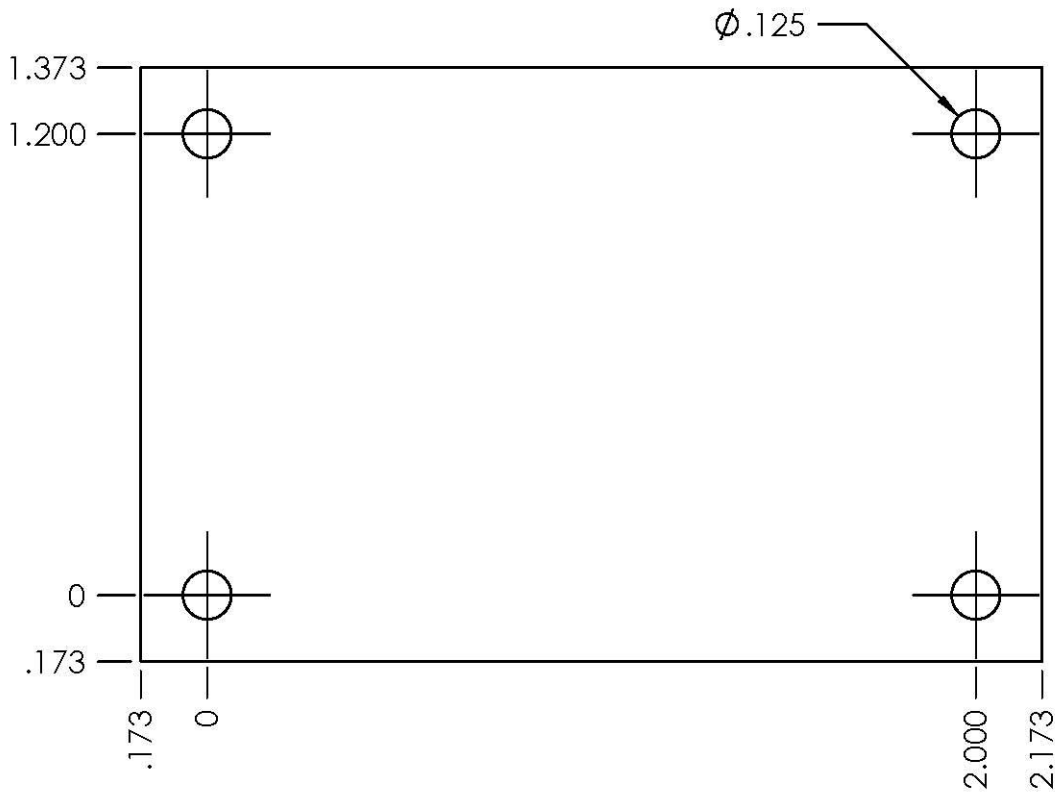
DIMENSIONS (TP-010)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" ± 0.002".
 3. Dimensional tolerances: ± 0.010" for hole diameters, ± 0.005" for hole locations, and ± 0.010" for all other unspecified dimension tolerances.

Figure 10 – Dimensions (TP-010)

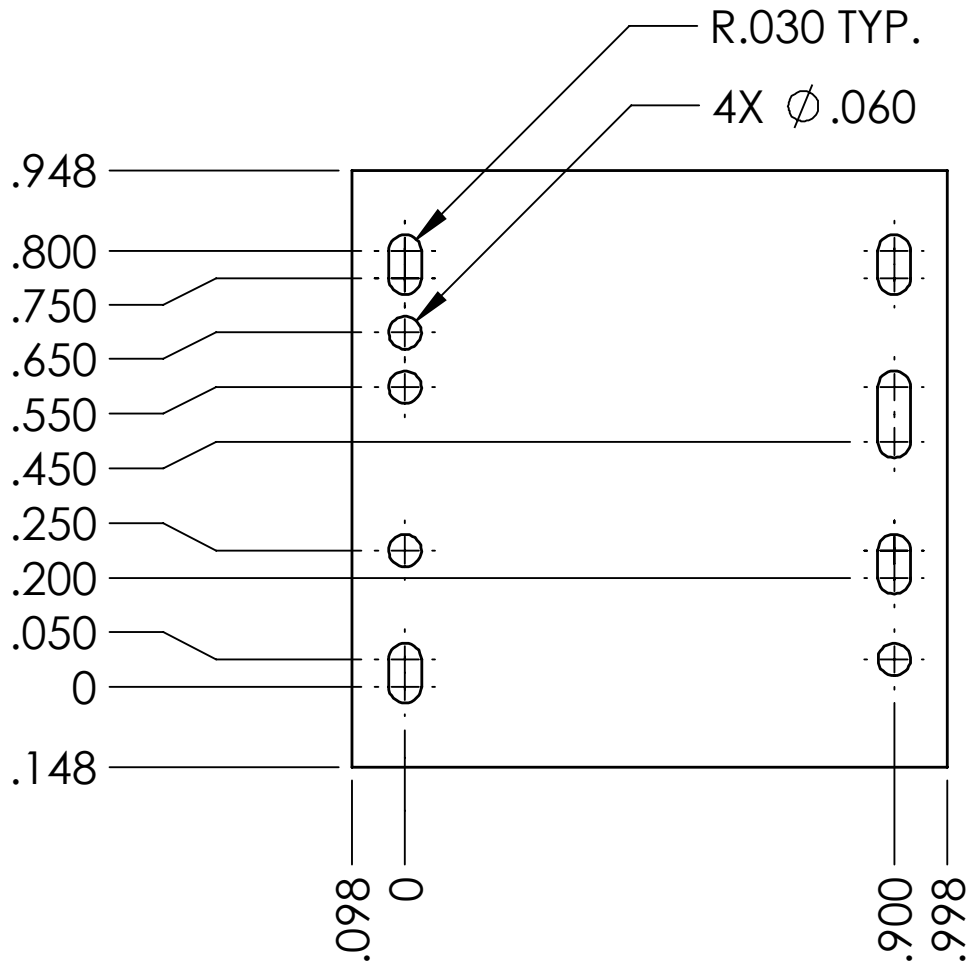
DIMENSIONS (TP-011)



- Note:
1. Dimensions are in inches.
 2. Thickness is $0.020'' \pm 0.002''$.
 3. Dimensional tolerances: $\pm 0.010''$ for hole diameters, $\pm 0.005''$ for hole locations, and $\pm 0.010''$ for all other unspecified dimension tolerances.

Figure 11 – Dimensions (TP-011)

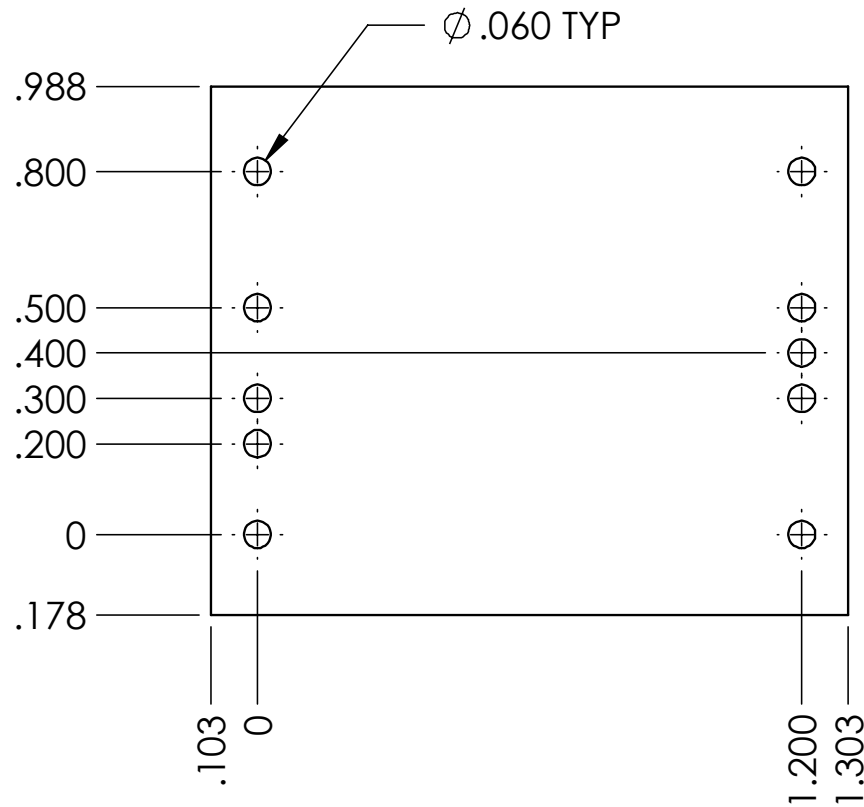
DIMENSIONS (TP-012)



- Note:
1. Dimensions are in inches.
 2. Thickness is $0.020'' \pm 0.002''$.
 3. Dimensional tolerances: $\pm 0.010''$ for hole diameters, $\pm 0.005''$ for hole locations, and $\pm 0.010''$ for all other unspecified dimension tolerances.

Figure 12 – Dimensions (TP-012)

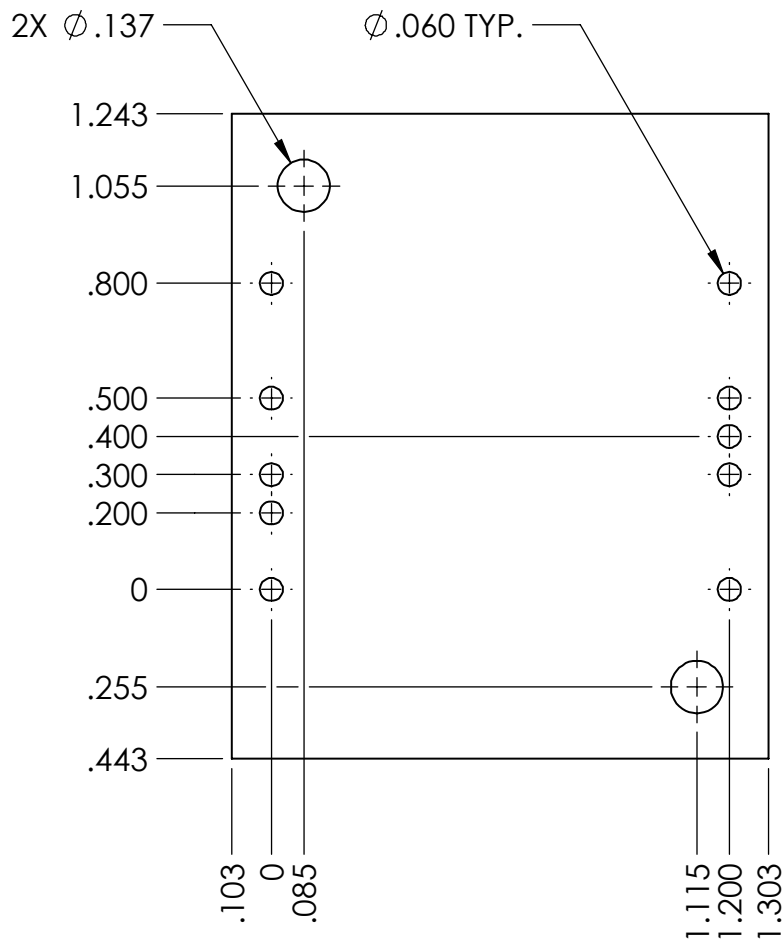
DIMENSIONS (TP-013)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" ± 0.002".
 3. Dimensional tolerances: ± 0.010" for hole diameters, ± 0.005" for hole locations, and ± 0.010" for all other unspecified dimension tolerances.

Figure 13 – Dimensions (TP-013)

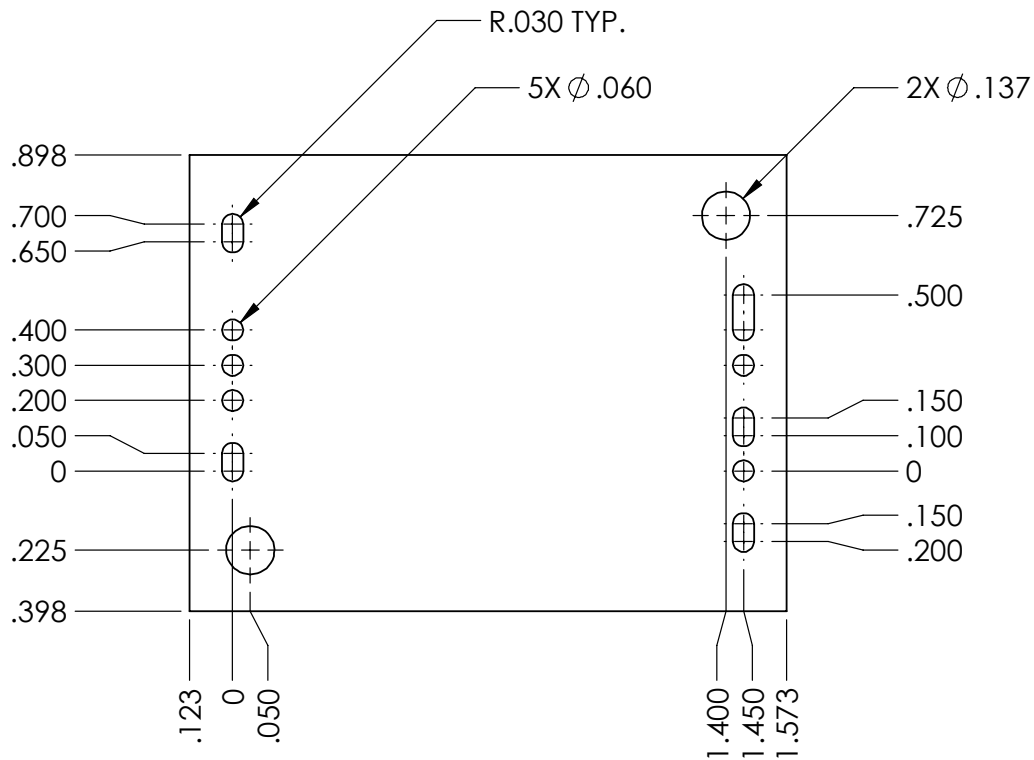
DIMENSIONS (TP-014)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" ± 0.002".
 3. Dimensional tolerances: ± 0.010" for hole diameters, ± 0.005" for hole locations, and ± 0.010" for all other unspecified dimension tolerances.

Figure 14 – Dimensions (TP-014)

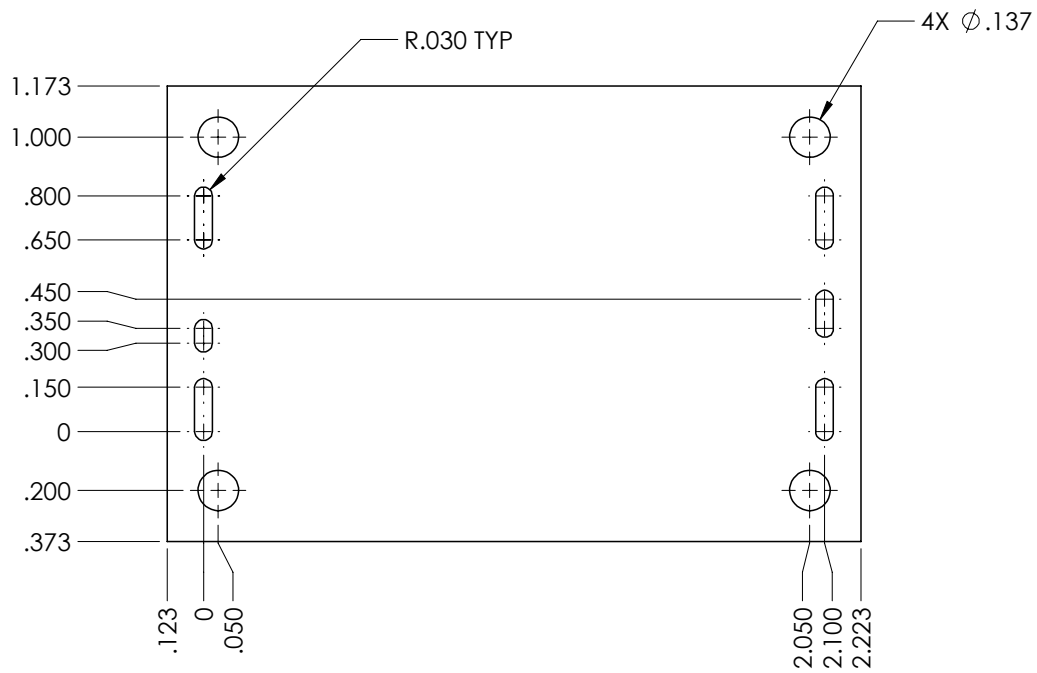
DIMENSIONS (TP-015)



- Note:
1. Dimensions are in inches.
 2. Thickness is $0.020" \pm 0.002"$.
 3. Dimensional tolerances: $\pm 0.010"$ for hole diameters, $\pm 0.005"$ for hole locations, and $\pm 0.010"$ for all other unspecified dimension tolerances.

Figure 15 – Dimensions (TP-015)

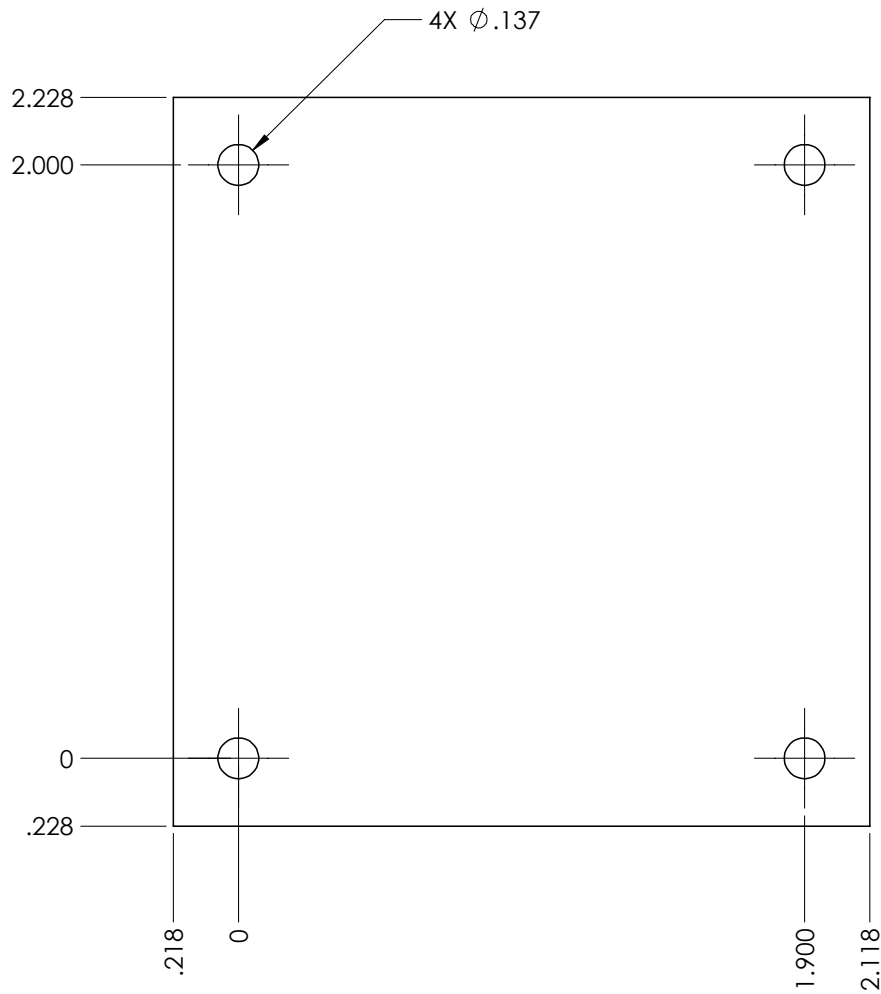
DIMENSIONS (TP-016)



- Note:
1. Dimensions are in inches.
 2. Thickness is $0.020'' \pm 0.002''$.
 3. Dimensional tolerances: $\pm 0.010''$ for hole diameters, $\pm 0.005''$ for hole locations, and $\pm 0.010''$ for all other unspecified dimension tolerances.

Figure 16 – Dimensions (TP-016)

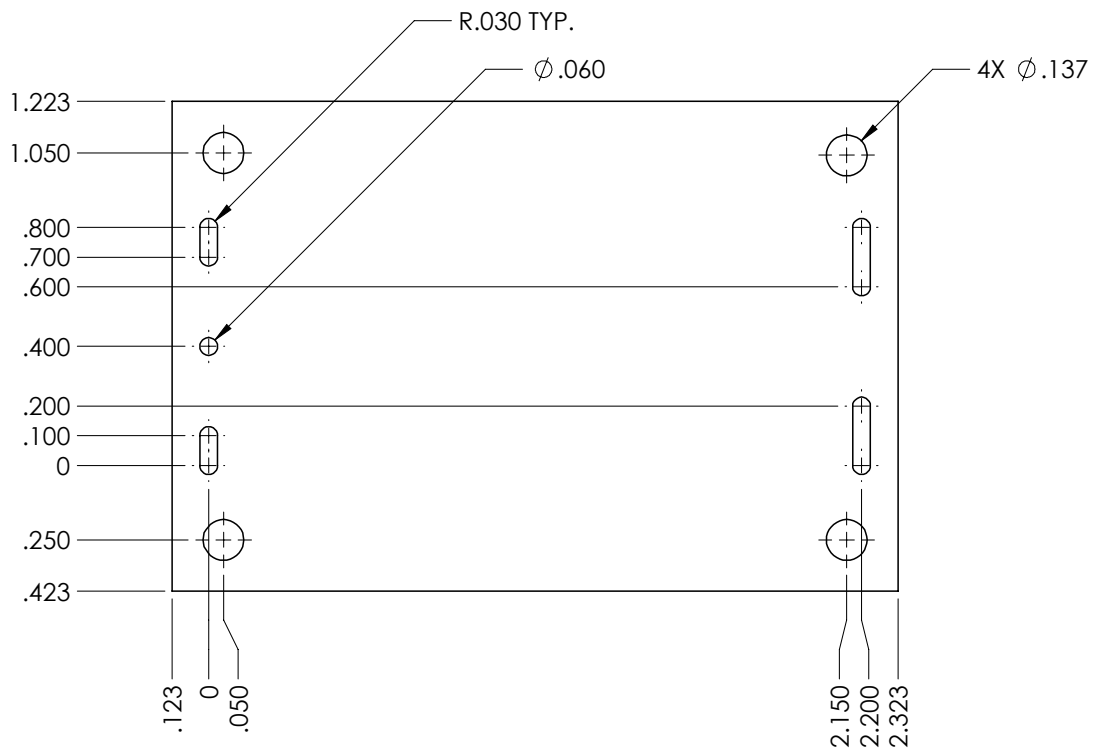
DIMENSIONS (TP-017)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" ± 0.002".
 3. Dimensional tolerances: ± 0.010" for hole diameters, ± 0.005" for hole locations, and ± 0.010" for all other unspecified dimension tolerances.

Figure 17 – Dimensions (TP-017)

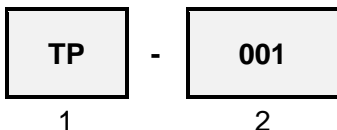
DIMENSIONS (TP-018)



- Note:
1. Dimensions are in inches.
 2. Thickness is 0.020" ± 0.002".
 3. Dimensional tolerances: ± 0.010" for hole diameters, ± 0.005" for hole locations, and ± 0.010" for all other unspecified dimension tolerances.

Figure 18 – Dimensions (TP-018)

ORDERING INFORMATION



(1) Product Series	(2) Thermal Pad Configuration
TP	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018

Please contact your sales representative or the VPT Inc. Sales Department for more information concerning additional configurations for other applications.

CONTACT INFORMATION

To request a quotation or place orders please contact your sales representative or the VPT Inc. Sales Department at:

Phone: (425) 353-3010
Fax: (425) 353-4030
E-mail: vptsales@vptpower.com

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