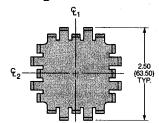
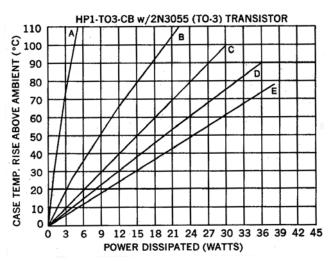


# Technical Data

# METAL CASE, CASE-MOUNTED SEMICONDUCTORS

# **HP1 Series for Single TO-3 or Stud Mount Devices**







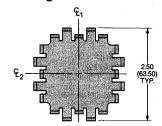
#### **DESCRIPTION OF CURVES**

- A. N.C. Horiz. Device Only Mounted to G-10.
- A. N.C. Horiz. & Vert. With Dissipator.
- B. 200 RPM w/Diss.
- C. 500 RPM w/Diss.
- E. 1000 RPM w/Diss.

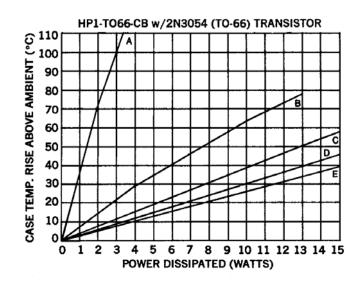
- Thermal Resistance Case to Sink is 0.1-0.3 °C/W w/Joint Compound.
- Derate 1.0 °C/watt for unplated part in natural convection only.

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IERC PART NO.			Semiconductor	Hole patt.	Max. Weight	
Unplated	Comm'l. Black	Mil. Black	Accommodated	Ref. No.	(Grams)	
·	Anodize	Anodize		(see pg.		
				1-28)		
HP1-000-U	HP1-000-CB	HP1-000-B	Undrilled		35.0	
HP1-TO3-U	HP1-TO3-CB	HP1-TO3-B	TO-3	16	35.0	
HP1-TO3-33U	HP1-TO3-33CB	HP1-TO3-33B	TO-3 IC	17	35.0	
HP1-TO3-44U	HP1-TO3-44CB	HP1-TO3-44B	TO-3 panel mount	31	35.0	
HP1-436-U	HP1-436-CB	HP1-436-B	TO-3 (4-pin)	18	35.0	
HP1-TO6-U	HP1-T06-CB	HP1-T06-B	TO-6, TO-36	19	35.0	
HP1-TO15-U	HP1-TO15-CB	HP1-TO15-B	TO-15, DO-5	23	35.0	
HP1-420-U	HP1-420-CB	HP1-420-B	Universal	27	35.0	

# **HP1 Series for Single TO-66 Outline**







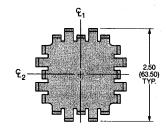
#### **DESCRIPTION OF CURVES**

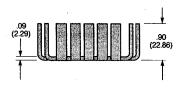
- 3. N.C. Horiz. Device Only Mounted to G-10.
- D. N.C. Horiz. & Vert. With Dissipator.
- E. 200 RPM w/Diss.
- F. 500 RPM w/Diss.
- E. 1000 RPM w/Diss.

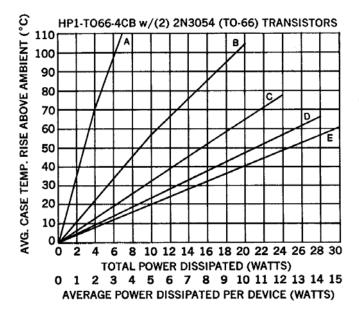
- Thermal Resistance Case to Sink is 0.5-0.7 °C/W w/Joint Compound.
- Derate 1.0 °C/watt for unplated part in natural convection only.

IERC PART NO.			Semiconductor	Hole patt.	Max. Weight
Unplated	Comm'l. Black Anodize	Mil. Black Anodize	Accommodated	Ref. No. (see pg. 1-28)	(Grams)
HP1-TO66-U HP1-TO66-35U	HP1-TO66-CB HP1-TO66-35CB	HP1-TO66-B HP1-TO66-35B	TO-66 TO-66 IC	24 25	35.0 35.0
HP1-TO66-49U	HP1-TO66-49CB	HP1-TO66-49B	TO-66 IC (Socket)	26	35.0

## **HP1 Series for Dual TO-66 Outline**







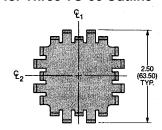
#### **DESCRIPTION OF CURVES**

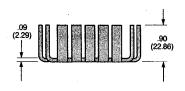
- C. N.C. Horiz. Device Only Mounted to G-10.
- G. N.C. Horiz. & Vert. With Dissipator.
- H. 200 RPM w/Diss.
- I. 500 RPM w/Diss.
- E. 1000 RPM w/Diss.

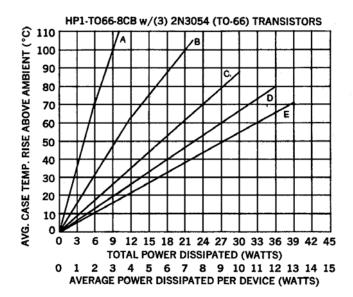
- Thermal Resistance Case to Sink is 0.5-0.7 °C/W w/Joint Compound.
- Derate 2.0 °C/watt per device for unplated part in natural convection only.
- Case Temperatures Match Within 2°C at equivalent power levels.

IERC PART NO.			Semiconductor	Hole patt.	Max. Weight
Unplated	Comm'l. Black Anodize	Mil. Black Anodize	Accommodated	Ref. No. (see pg. 1-30)	(Grams)
HP1-TO66-4U HP1-TO66-36U	HP1-TO66-4CB HP1-TO66-36CB	HP1-TO66-4B HP1-TO66-36B	Two TO-66s Two TO-66 lcs	32 34	35.0 35.0

#### **HP1 Series for Three TO-66 Outline**







#### **DESCRIPTION OF CURVES**

- D. N.C. Horiz. Device Only Mounted to G-10.
- J. N.C. Horiz. & Vert. With Dissipator.
- K. 200 RPM w/Diss.
- .. 500 RPM w/Diss.
- E. 1000 RPM w/Diss.

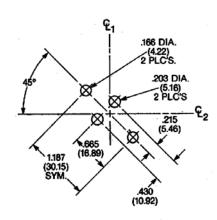
- Thermal Resistance Case to Sink is 0.5-0.7 °C/W w/Joint Compound.
- Derate 3.0 °C/watt per device for unplated part in natural convection only.
- Case Temperatures Match Within 2°C at equivalent power levels in natural convection.

	IERC PART NO.		Semiconductor	Hole patt.	Max. Weight
Unplated	Comm'l. Black Anodize	Mil. Black Anodize	Accommodated	Ref. No. (see pg. 1-30)	(Grams)
HP1-TO66-8U HP1-TO66-39U	HP1-TO66-8CB HP1-TO66-39CB	HP1-TO66-8B HP1-TO66-39B	Two TO-66s Two TO-66 lcs	33 35	35.0 35.0

#### **HOLE PATTERNS**

**16.** Hole pattern no. 1 accommodates T0-3s. Available in UP, UP1, UP2, HP1, and HP3 series heat dissipators.

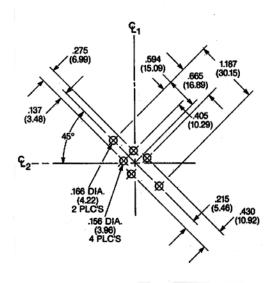
**17.** Hole pattern no. 202 accommodates T0-3 ICs. Available in UP, UP1, UP2, HP1, and HP3 series heat dissipators.

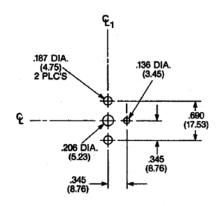


(3.86) 2 PLC'S (2.43) ON .500 DIA. B.C. 45° 7 PLC'S TYP. 40° 7 PLC'S TYP. 40° 7 PLC'S TYP. 60°

**18.** Hole pattern no. 436 accommodates t0-3s (4-pin). Available in UP, UP1, UP2, HP1, and HP3 series heat dissipators.

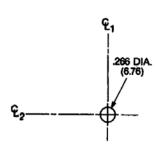
**19.** Hole pattern no. 2 accommodates T0-6s or T0-36s. Available in UP, UP1, UP2, HP1, and HP3 series heat dissipators.



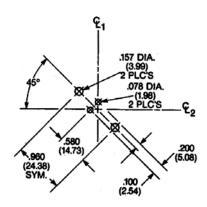


23. Hole pattern no. 3 accommodates TO-15s, DO-5s and other  $\frac{1}{4}$ " stud mount devices. Available in UP, UP1, UP2, HP1, and HP3 series heat dissipators.

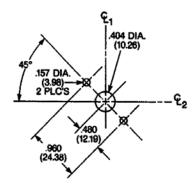
**24.** Hole pattern no. 114 accommodates TO-66s. Available in UP, UP1, UP2, HP1, and HP3 series heat dissipators.



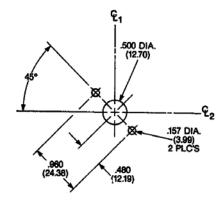
**25.** Hole pattern no. 199 accommodates TO-66 ICs. Available in UP, UP1, UP2, HP1, and HP3 series heat dissipators.



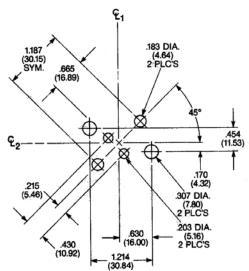
**26.** Hole pattern no. 226 accommodates TO-66 ICs (socket). Available in UP, UP1, UP2, HP1, and HP3 series heat dissipators.

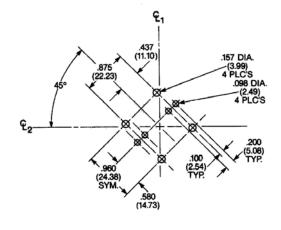


**31.** Hole pattern no. 213 accommodates one TO-3 (panel mounted). Available in HP1 and HP3 series heat dissipators only.

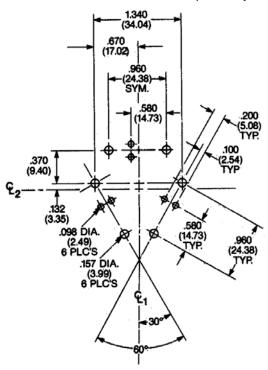


**32.** Hole pattern no. 150 accommodates two TO-66s. Available in HP1 and HP3 series heat dissipators only.

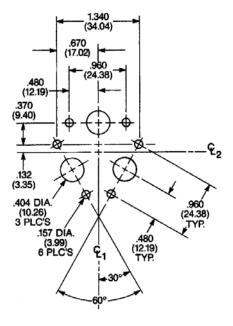




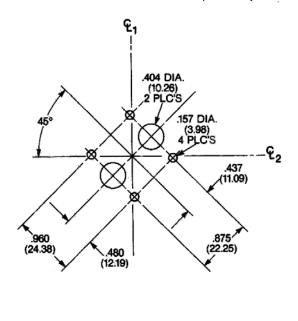
**33.** Hole pattern no. 185 accommodates three TO-66s. Available in HP1 and HP3 series heat dissipators only.



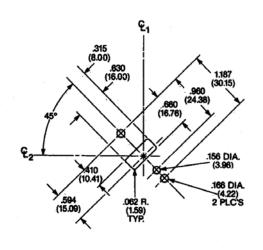
**35.** Hole pattern no. 203 accommodates three TO-66 ICs. Available in HP1 and HP3 series heat dissipators only.



**34.** Hole pattern no. 201 accommodates two TO-66s ICs. Available in HP1 and HP3 series heat dissipators only.



**27.** Hole pattern no. 420 (Universal) accommodates T0-3s, T0-66s, T0-126s, T0-127s, or T0-220s. Available in UP, UP1, UP2, HP1, and HP3 series heat dissipators.



CTS IERC, Heat Sinks and Thermal Management Solutions

413 North Moss Street, Burbank, California 91502 Tel: (818) 842-7277 Fax: (818) 848-8872