

300W Eighth Brick Converter

Features

- ◆ Standard Eighth Brick Footprint
- ◆ 36-75VDC Input
- ◆ 12V Nominal Output
- ◆ Through Hole Mounting
- ◆ 2250VDC Basic Isolation
- ◆ Digital adaptive control for fast transient response
- ◆ High Operating Efficiency (up to 94.6%)
- ◆ Constant Switching Frequency
- ◆ Baseplate Cooled



Key Market Segments & Applications



Specifications				
Model		iEH300		
Nominal Output Voltage	VDC	10.8		12
Input Voltage Range	VDC		36-75*	
Ripple & Noise (max) (pk-pk) (1)	mV	150		120
Line Regulation (max)	mV	50		60
Load Regulation (max)	mV	100		60
Overload Protection Threshold (3)	A	36		29.5
Overvoltage Protection (Typ) (2)	VDC	13.1		14.8
Overtemperature Protection (3)	-		Yes	
Remote On / Off	-		Negative Logic	
Temperature (operating)	°C	-40 to 124		-40 to 130
Temperature (storage)	°C		-55 to 125	
Humidity (operating)	%RH		20-95% RH Non condensing	
Humidity (storage)	%RH		10-95% RH Non condensing	
Cooling	-	Conduction, convection or forced air (see detailed datasheet for derating)		
Isolation Voltage	VDC	2250VDC Input to Output, 1500VDC Input to Baseplate		
Vibration (non operating)	-	5-50Hz @ 0.5g (4.9m/s ²), and 50-500Hz @ 1.5g (14.7m/s ²) per Bellcore TR-EOP-000063-5.4.4		
Shock	-	196.1m/s ²		
Safety Agency Approvals	-	UL60950 (US and Canada), CB scheme IEC 60950-1 (2nd edition) AM1, CE Mark EN 60950-1/A12		
Weight (max)	g	50		
Size	mm/in.	58.42 x 22.86 x 12.70 / 2.02 x 0.9 x 0.49		
Warranty	yrs	3 Years		

*When operating below 40V input, the module will operate, but load regulation may be out of specification.

(1) See website for detailed specification and test methods.

(2) See model selector

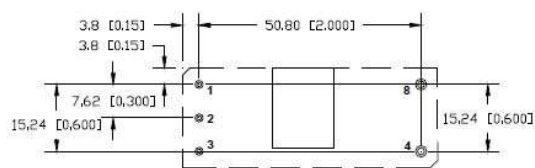
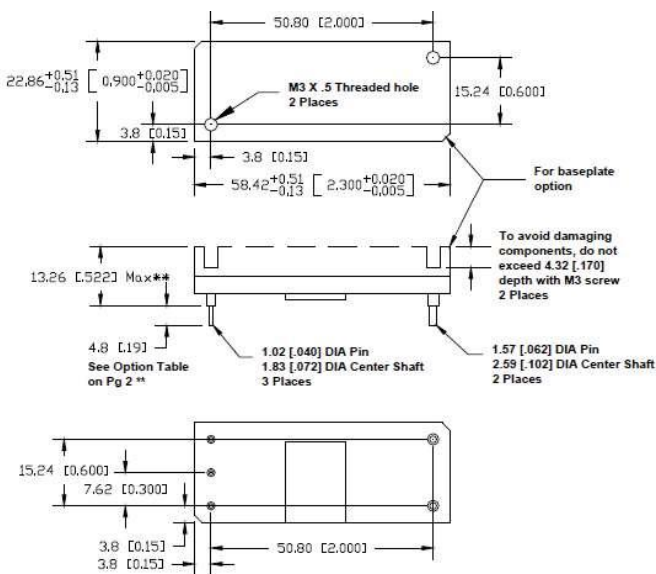
(3) Non-Latching

Model Selector

Model	Input Voltage (V)	Output Voltage (V)	Droop Share	Max. Curr. (A)	Max. Output Power (W)	Base Plate	OVP	Efficiency at Full Load (%)	Pin Length
iEH48028A108V-103-R	36-75	10.8	No	28	300	Yes	Non-Latch	94	0.145
iEH48028A108V-109-R	36-75	10.8	No	28	300	Yes	Latch	94	0.190
iEH48025A120V-003-R	36-75	12	No	25	300	No	Non-Latch	94.6	0.145
iEH48025A120V-103-R	36-75	12	No	25	300	Yes	Non-Latch	94.6	0.145
iEH48025A120V-107-R	36-75	12	No	25	300	Yes	Non-Latch	94.6	0.190
iEH48025A120V-109-R	36-75	12	No	25	300	Yes	Latch	94.6	0.190

Preferred model

Outline Drawing



Recommended hole pattern (top view)

Pinout

PIN	Function	PIN	Function
1	Vin (+)	5	none
2	On / Off	6	none
3	Vin (-)	7	none
4	Vo (-)	8	Vo (+)

For Additional Information, please visit
<https://product.tdk.com/info/en/products/power/index.html>

