D H H B 3 0 0

S E R I E S

300 Watts Half Brick Type 2:1 High Input Voltage Isolated DC - DC Converters

FEATURES

- Over Temperature Protection
- 3000VAC I/O Isolation / Regulated Outputs
- Fixed 300KHz Switching Frequency
- Over Voltage/Current Protection
- Input Under Voltage Protection
- Low No Load Power Consumption
- -55℃ Operating Available (Suffix "L)

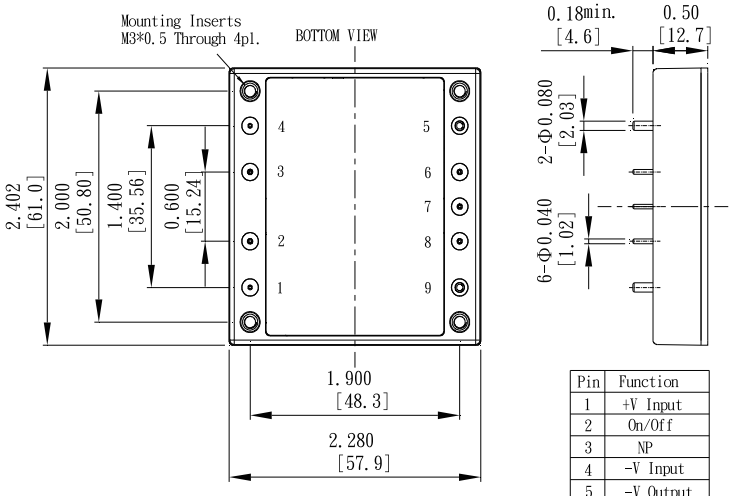
SPECIFICATIONS

Input Voltage Range.....300V(Range 180-425V)
Undervoltage lockout ... power up: 170VDC / power down: 160VDC
Positive Logic Remote On/Off Logic .....See note
Input Filter.....Pi Type
Voltage Accuracy.....±1% max
External Load Capacitance .....See Model Number Table
External Trim Adj. Range.....+10%, -20%
R & N (20MHz BW) ..... 5V: 60mV RMS, 120mVpK-pK max
12V: 60mV RMS, 150mVpK-pK max
24V: 120mV RMS, 240mVpK-pK max
28V: 150mV RMS, 280mVpK-pK max
48V: 200mV RMS, 480mVpK-pK max
Temperature Coefficient.....± 0.02%/°C max
Short Circuit Protection.....Continuous
Line Regulation (High Lline t Low Line).....± 0.2% max
Load Regulation (Full Load to Zero Load).....± 0.2% max
OVP Trip Range, % Vo Nom. ..... 115~140%
Current Limit .....105%~140% Nominal Output
Isolation Voltage ..... Input to Output.....3000Vac
Input to Case(Base Plate).....2500Vac
Output to Case(Base Plate).....500Vac
Isolation Resistance.....100M Ω min
Operating Case Temperature.....-40℃ To+100℃
Storage Temperature Range.....-55℃ To +105℃
Thermal Shutdown case Temperature ..... 105℃
Case Material.....Aluminum Baseplate w/plastic Case

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	No Load Input Current	EFF. Typ. %	Capacitor Load Max.
DHHB300-C1xyz	180-425	5	60.0	10mA	89.0	10000μF
DHHB300-C2xyz	180-425	12	25.0	10mA	88.0	10000μF
DHHB300-C9xyz	180-425	24	12.5	10mA	90.0	6000μF
DHHB300-C9Cxyz	180-425	28	10.7	10mA	90.0	6000μF
DHHB300-C9Bxyz	180-425	48	6.25	10mA	90.0	3000μF

Note:
1: All Specifications Typical at Nominal Line, Full Load, and 25°C Unless Otherwise Noted.
2. Measured at Nominal Input Voltage 300 VDC.
3. An External Input Capacitor 150uF for All Models are Recommended to Reduce Input Ripple Voltage.
4. Output Ripple & Noise Measured with 10μF Tantalum & 1μF Ceramic Capacitor Across Output(5V: 47μF Polymer Tantalum & 1μF Ceramic Capacitor Across Output ; 10μF Aluminum & 1μF Ceramic Capacitor Across Output ; 10μF & 1μF Ceramic Capacitor Across Output)
5. Remote ON/OFF Logic Compatibility.....Open collector Ref. To -V Pin
Suffix x = blank stands for Positive Remote Logic.
Module ON..... >3.5V to 75V or Open Circuit
Module OFF..... 0V to < 1.2V
Suffix x = N, Negative Remote Logic.
Module ON..... 0V to < 1.2V
Module OFF..... >3.5V to 75V or Open Circuit
Suffix y = blank stands for M3x0.5 mounting inserts
Suffix y = C stands for Clear mounting insert (3.2mm DIA)
Suffix z = blank stands for -40~105°C operating temp.
Suffix z = L stands for -55~105°C operating temp.

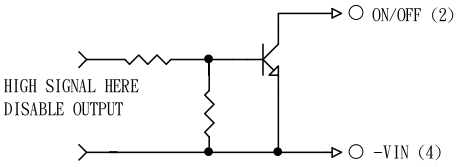
MECHANICAL DRAWING (Unit: inch(mm))



Pin	Function
1	+V Input
2	On/Off
3	NP
4	-V Input
5	-V Output
6	-Sense
7	Trim
8	+Sense
9	+V Output

Note :
All Dimensions in Inches [mm]
Tolerance
Inches: x.xx = ±0.02 , x.xxx = ±0.010
Minimeters: x.x = ±0.5 , x.xx = ±0.25

Remote On/Off Control



External Output Trim