

6000HDI series

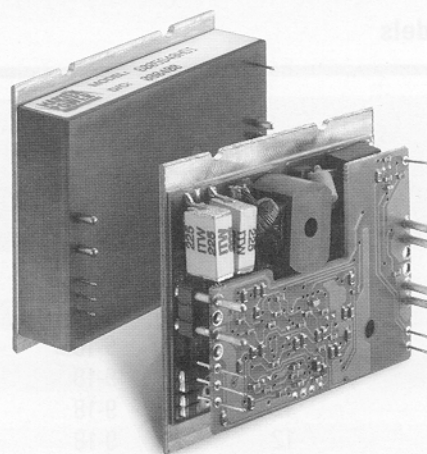
33 to 60 watts

Key Features:

- 40 W/in³ power density
- Thermal Shutdown
- Efficiency to 90%

Ideally Suited For:

- Telecom equipment
- Mixed analog/digital subsystems
- Distributed power networks



Input Characteristics

Input Voltage Range:	9-18, 18-36, 36-75 VDC
Input Under Voltage Shutdown:	8V (9-18), 16V (18-36), 33V (36-75) VDC
Input Filtering:	L-C Network
Efficiency:	See Available Models Chart
No Load Input Current:	30mA

Output Characteristics

Output Voltage Accuracy:	+/-1%
Output Voltage Adjustment:	+/-10%
Total Error Band:	+/-2% Max.
Line Regulation:	+/-0.5% Low Line to High Line
Load Regulation:	+/-0.5%, 0.5A to Full Load
Ripple and Noise:	60mV or 1% pk-pk, 20MHz Bandwidth
Transient Response/Recovery Time:	200µs, 25% Load Step
Temperature Coefficient:	+/-0.02% / °C
Short Circuit Protection:	Continuous (Hiccup Mode)
Over Voltage Protection:	Standard

Environmental Characteristics

Operating Temperature Range (Ambient):	-40°C to +85°C, See 6000HDI Series Data Sheet for Derating curves.
Storage Temperature Range:	-55°C to +125°C
Maximum Case Temperature:	105°C Baseplate
Humidity:	Up to 95%, Non-condensing
Vibration:	5Grms, 5Hz to 2KHz
Reliability (MTBF per Mil-HDBK-217):	>600,000 hours, +25°C, Ground Benign

General Characteristics

Switching Frequency:	400KHz, Fixed
Isolation (Input to Output):	1500VDC minimum (1 minute)
Isolation Capacitance:	1200pF
Weight:	2.1 oz (59.5g)
Case Material:	Aluminum baseplate with black anodized aluminum case
Agency Approvals:	UL, CSA, TUV and CE (LVD, 48 Vin Models)

Distributed By:
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Additional Features

Remote Shutdown:

Supply On: Open or >3.5 VDC
 Supply Off: <0.8 VDC

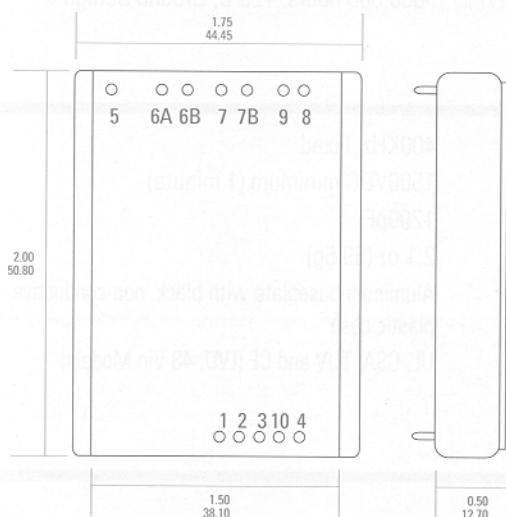
Synchronization

Thermal Shutdown

Available Models

Model	Nominal Input Voltage (VDC)	Input Voltage Range (VDC)	Output Voltage (VDC)	Max. Output Current (A)	Efficiency @ Full-Load (%)
6003S12HDI	12	9-18	3.3	10.0	80
6005S12HDI	12	9-18	5.0	10.0	83
6012S12HDI	12	9-18	12.0	4.2	86
6015S12HDI	12	9-18	15.0	3.3	87
6024S12HDI	12	9-18	24.0	2.1	88
6003S24HDI	24	18-36	3.3	12.0	81
6005S24HDI	24	18-36	5.0	12.0	85
6012S24HDI	24	18-36	12.0	5.0	87
6015S24HDI	24	18-36	15.0	4.0	88
6024S24HDI	24	18-36	24.0	2.5	89
6003S48HDI	48	36-75	3.3	12.0	81
6005S48HDI	48	36-75	5.0	12.0	85
6012S48HDI	48	36-75	12.0	5.0	88
6015S48HDI	48	36-75	15.0	4.0	89
6024S48HDI	48	36-75	24.0	2.5	90

Outline Drawing



Pinout Chart

Pin	Function
1	+V IN
2	-V IN
3	SYNC
4	REMOTE ON/OFF
5	+SENSE
6A/6B	+V OUT
7A/7B	-V OUT
8	TRIM
9	-SENSE
10	N/C

All specifications are typical at 25 degrees C with nominal input voltage and full output unless otherwise noted. Specifications are subject to change without notice. All dimensions are typical.