

100HFS series

1 watt



Key Features:

- **High Efficiency**
- **1000 VDC Input/Output Isolation**
- **Requires as little as 0.108 Square inches**

Ideally Suited For:

- **Telecom equipment**
- **Mixed analog/digital subsystems**
- **Data Communications**

Input Characteristics

Input Voltage Range:	+/-10% of Nominal, <i>See Available Models Chart</i>
Input Filtering:	Internal Capacitor
Efficiency:	<i>See Available Models Chart</i>

Output Characteristics

Output Voltage Accuracy:	+/- 3% Max
Output Voltage Balance:	+/- 1% Max, Dual Output Models (Equal Loads)
Minimum Load Requirements:	20% Min Load
Line Regulation:	1.5%/V _{in} , Max
Load Regulation:	<i>See Available Models Chart</i>
Ripple and Noise:	100mV pk-pk Typ., 20MHz Bandwidth
Over Line, Load & Temperature:	200mV pk-pk Max, 20MHz Bandwidth
Temperature Coefficient:	+/- 0.02%/°C
Short Circuit Protection:	Momentary, 0.5 second Max.
Over Voltage Protection:	N/A

Environmental Characteristics

Operating Temperature Range (Ambient):	-25°C to +85°C, Derate 3.3%/°C above 71°C
Storage Temperature Range:	-40°C to +125°C
Maximum Case Temperature:	95°C
Humidity:	Up to 95% Non-condensing
Cooling:	Free-air Convection
Reliability (MTBF per Mil-HDBK-217):	>1,100,000 hours, +25°C, Ground Benign

General Characteristics

Switching Frequency:	100kHz, Typ.
Isolation Voltage (Input to Output):	1000VDC, (1 minute)
Isolation Resistance:	10 ⁹ Ohms
Isolation Capacitance:	100pF, Max.
Weight:	Singles: 0.05 oz (1.7g), Max. Duals: 0.09 oz (2.6g), Max
Case Material:	Non-conductive black plastic
Flammability:	UL 94-V0 (Materials)

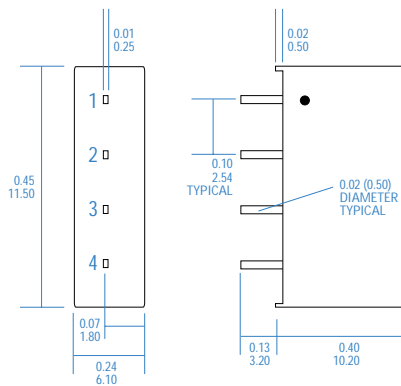
**MARTEK
POWER**

Available Models

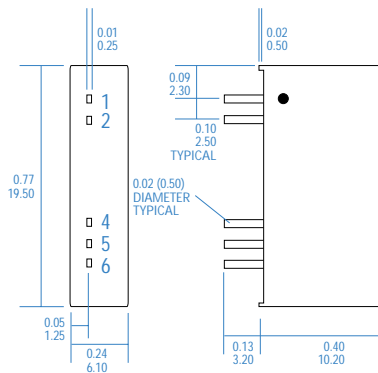
Model	Nominal Input Voltage (VDC)	Input Voltage Range (VDC)	Output Voltage (VDC)	Max. Output Current (mA)	Efficiency @ Full-Load (%)	Load Regulation % Max
105S5HFS	5	4.5-5.5	5.0	200	69	11
109S5HFS	5	4.5-5.5	9.0	110	76	8
112S5HFS	5	4.5-5.5	12.0	84	77	7
115S5HFS	5	4.5-5.5	15.0	67	78	6
105D5HFS	5	4.5-5.5	+/-5.0	+/-100	72	8
109D5HFS	5	4.5-5.5	+/-9.0	+/-56	77	8
112D5HFS	5	4.5-5.5	+/-12.0	+/-42	78	8
115D5HFS	5	4.5-5.5	+/-15.0	+/-34	79	8
105S12HFS	12	10.8-13.2	5.0	200	71	9
109S12HFS	12	10.8-13.2	9.0	110	77	5
112S12HFS	12	10.8-13.2	12.0	84	79	5
115S12HFS	12	10.8-13.2	15.0	67	80	4
105D12HFS	12	10.8-13.2	+/-5.0	+/-100	74	8
109D12HFS	12	10.8-13.2	+/-9.0	+/-56	79	8
112D12HFS	12	10.8-13.2	+/-12.0	+/-42	81	8
115D12HFS	12	10.8-13.2	+/-15.0	+/-34	81	8
105S24HFS	24	21.6-26.4	5.0	200	70	8
109S24HFS	24	21.6-26.4	9.0	110	76	5
112S24HFS	24	21.6-26.4	12.0	84	79	4
115S24HFS	24	21.6-26.4	15.0	67	79	4
105D24HFS	24	21.6-26.4	+/-5.0	+/-100	72	8
109D24HFS	24	21.6-26.4	+/-9.0	+/-56	76	8
112D24HFS	24	21.6-26.4	+/-12.0	+/-42	79	8
115D24HFS	24	21.6-26.4	+/-15.0	+/-34	80	8

Outline Drawing

SINGLE



DUAL



Pinout Chart

Pin	Single	Dual
1	- Vin	+ Vin
2	+ Vin	- Vin
3	- Vout	No Pin
4	+ Vout	- Vout
5	No Pin	Common
6	No Pin	+ Vout

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.