



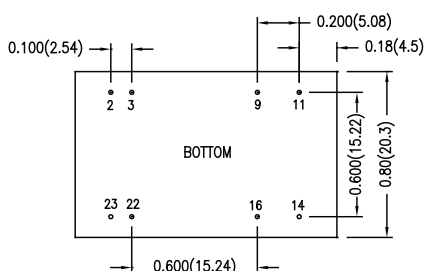
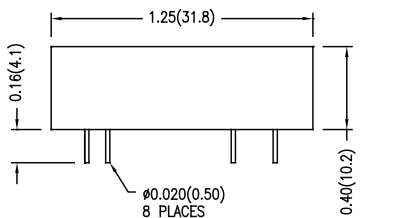
- Efficiency up to 86%
- 1500VDC Isolation
- MTBF > 1,000,000 Hours
- 2:1 Input Range
- CSA60950 Approved
- RoHS Compliant



5-6 Watt DMJ Single and Dual Series



Model Number	Voltage			Current				Reflected Ripple	Input Overvoltage (1000ms)	Efficiency	Capacitive Load
	Input		Output	Input		Output					
	Nom. (VDC)	Range (VDC)	(VDC)	@ No Load (mA)	@ Max Load (mA)	Min (mA)	Max (mA)				
DMJ4H5S3R3	5	4.5-7	3.3	80	1056	60	1200	100	10	75	6800 µF
DMJ5H5S5	5	4.5-7	5	80	1265	50	1000	100	10	79	6800 µF
DMJ6H5S12	5	4.5-7	12	80	1463	25	500	100	10	82	6800 µF
DMJ6H5S15	5	4.5-7	15	80	1463	20	400	100	10	82	6800 µF
DMJ5H5D5	5	4.5-7	±5	80	1265	±25	±500	100	10	79	1000 µF
DMJ6H5D12	5	4.5-7	±12	80	1463	±12.5	±250	100	10	82	1000 µF
DMJ6H5D15	5	4.5-7	±15	80	1463	±10	±200	100	10	82	1000 µF
DMJ4H12S3R3	12	9-18	3.3	30	429	60	1200	25	25	77	6800 µF
DMJ5H12S5	12	9-18	5	30	514	50	1000	25	25	81	6800 µF
DMJ6H12S12	12	9-18	12	30	595	25	500	25	25	84	6800 µF
DMJ6H12S15	12	9-18	15	30	595	20	400	25	25	84	6800 µF
DMJ5H12D5	12	9-18	±5	30	514	±25	±500	25	25	81	1000 µF
DMJ6H12D12	12	9-18	±12	30	595	±12.5	±250	25	25	84	1000 µF
DMJ6H12D15	12	9-18	±15	30	595	±10	±200	25	25	84	1000 µF
DMJ4H24S3R3	24	18-36	3.3	15	209	60	1200	15	50	79	6800 µF
DMJ5H24S5	24	18-36	5	15	251	50	1000	15	50	83	6800 µF
DMJ6H24S12	24	18-36	12	15	291	25	500	15	50	86	6800 µF
DMJ6H24S15	24	18-36	15	15	291	20	400	15	50	86	6800 µF
DMJ5H24D5	24	18-36	±5	15	251	±25	±500	15	50	83	1000 µF
DMJ6H24D12	24	18-36	±12	15	291	±12.5	±250	15	50	86	1000 µF
DMJ6H24D15	24	18-36	±15	15	291	±10	±200	15	50	86	1000 µF
DMJ4H48S3R3	48	36-75	3.3	8	104	60	1200	10	100	79	6800 µF
DMJ5H48S5	48	36-75	5	8	126	50	1000	10	100	83	6800 µF
DMJ6H48S12	48	36-75	12	8	145	25	500	10	100	86	6800 µF
DMJ6H48S15	48	36-75	15	8	145	20	400	10	100	86	6800 µF
DMJ5H48D5	48	36-75	±5	8	126	±25	±500	10	100	83	1000 µF
DMJ6H48D12	48	36-75	±12	8	145	±12.5	±250	10	100	86	1000 µF
DMJ6H48D15	48	36-75	±15	8	145	±10	±200	10	100	86	1000 µF



Pin Connections (NC) Not Connected		
Pin	Single	Dual
2	-Vin	-Vin
3	-Vin	-Vin
9	No Pin	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22	+Vin	+Vin
23	+Vin	+Vin

Dimensions are inches (mm) unless noted

Tolerance: Inches	Millimeters
X.XX ±0.01	X.X ±0.25
X.XXX ±0.005	X.XX ±0.13
Pin	±0.002 ±0.05

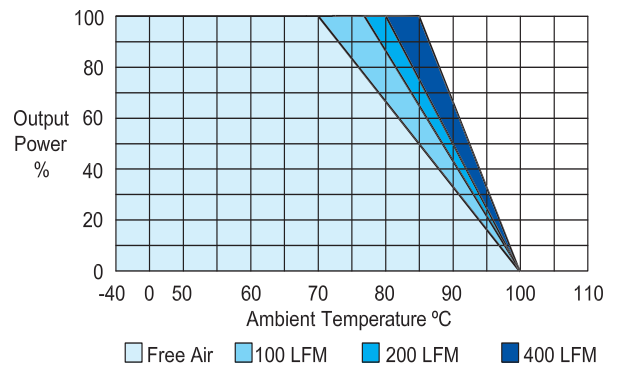


See Model Selection Table for Model Specific Parameters

Input Parameters	Min	Typ	Max	Units	
Reverse Polarity Input Current			1	A	
Short Circuit Input Power		1000	3000	mW	
Start Voltage	5 Vin 12 Vin 24 Vin 48 Vin	3 4.5 8 16	3.5 6 12 24	4.4 8 16 32	VDC
Under Voltage Shutdown	5 Vin 12 Vin 24 Vin 48 Vin		4 8 16 32		VDC
Switching Frequency		300		kHz	
Input Filter	Pi Filter				
Conducted EMI	Meets EN55022, Class A and FCC Part 15, Class A				
Output Parameters	Min	Typ	Max	Units	
Output Voltage Accuracy		±0.5	±1.0	%	
Output Voltage Balance Dual Output, Balanced Loads		±0.5	±2.0	%	
Load Regulation Io = 20% to 100%		±0.3	±1.0	%	
Line Regulation Vin=Min. to Max.		±0.1	±0.3	%	
Ripple & Noise (20MHz)		50	75	mV P-P	
Ripple & Noise (20 MHz) Over Line, Load & Temp			100	mV P-P	
Ripple & Noise (20 MHz)			15	mV RMS	
Over Power Protection	120			%	
Transient Recovery Time 25% Load Step Change		150	300	µs	
Transient Response Deviation, 25% Load Step Change		±2	±6	%	
Temperature Coefficient		±0.01	±0.02	% / °C	
Short Circuit Protection	Continuous				
General Specifications	Min	Typ	Max	Units	
Isolation Voltage, 60 seconds	1500			VDC	
Isolation Resistance 500VDC	1000			Mohms	
Isolation Capacitance, 100kHz, 1V		380	500	pF	
Operating Temperature with Derating (Ambient)	-40		+85	°C	
Case Temperature			+90	°C	
Storage Temperature	-50		+125	°C	
Humidity			95	%	
MTBF MIL-HDBK-217F @25°C, Ground Benign	1000			K Hours	
Cooling	Free-Air Convection				
Case Size	1.25 x 0.80 x 0.40 inches 31.8 x 20.3 x 10.2 mm				
Case Material	Metal with Non-Conductive Baseplate (UL94V-0)				
Weight	16.9g				
Agency Approval	CSA60950 Approved				

Notes:

- Specifications typical at Ta=+25°C, resistive load, nominal input voltage, full rated output current unless otherwise noted.
- Transient recovery time is measured to within 1% error band for a step change in output load 75% to 100%.
- ConTech power converters require a minimum output loading to maintain specified regulation. Operation under no-load conditions will not damage these modules; however, they may not meet all specifications listed.
- The series has a limitation of a maximum connected capacitance at the output. The power module may be operated in current limiting mode during start-up, affecting the ramp-up and the startup time.
- When measuring peak-to-peak output noise, use a Cout 0.47µF ceramic capacitor. Scope measurement should be made by using a BNC socket, measurement bandwidth is 0-20MHz. Position the load between 2" and 2.5" from the converter.
- Water washability - ConTech DC/DC converters are designed to withstand most solder/wash processes. Careful attention should be used when assessing the applicability in your specific manufacturing process. Converters are not hermetically sealed.
- See ConTech website for Definition of Terms, Application Notes, and Test Setups and Parameters. www.contech-us.com/appnotes.html.
- Specifications subject to change without notice.
- See ConTech website www.contech-us.com/pdf/rohs.pdf for RoHS Statement.



Derating Curve

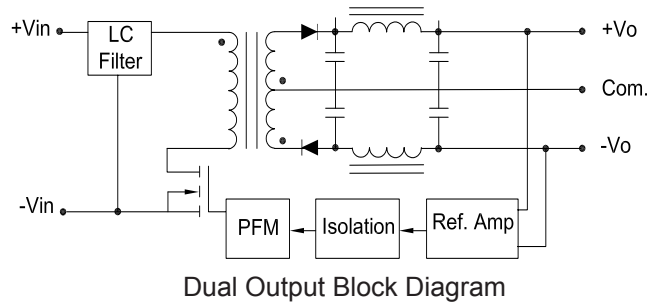
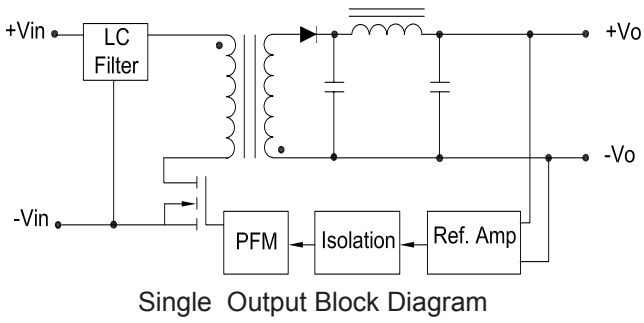
To avoid exceeding the maximum temperature rating of the components inside the power module, the case temperature must be kept below 90°C.

Input Fuse Selection Table	
5V Input	3000 mA Slow-Blow
12V Input	1500 mA Slow-Blow
24V Input	700 mA Slow-Blow
48V Input	350 mA Slow-Blow

External fusing should be used for system protection due to a catastrophic failure. See ConTech website for Fusing Application Notes to determine the correct fuse.

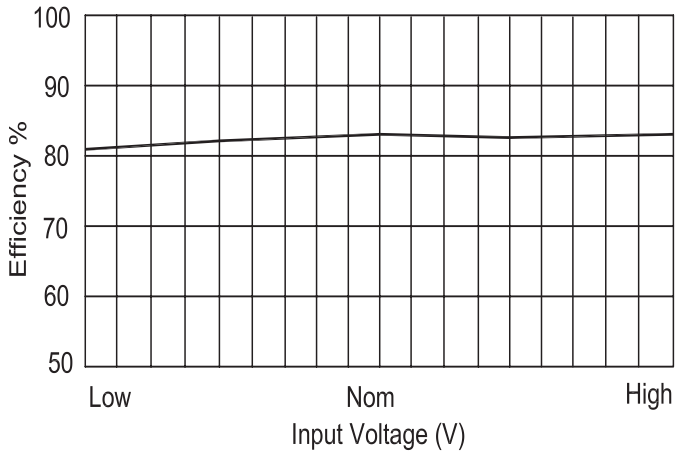


Block Diagrams

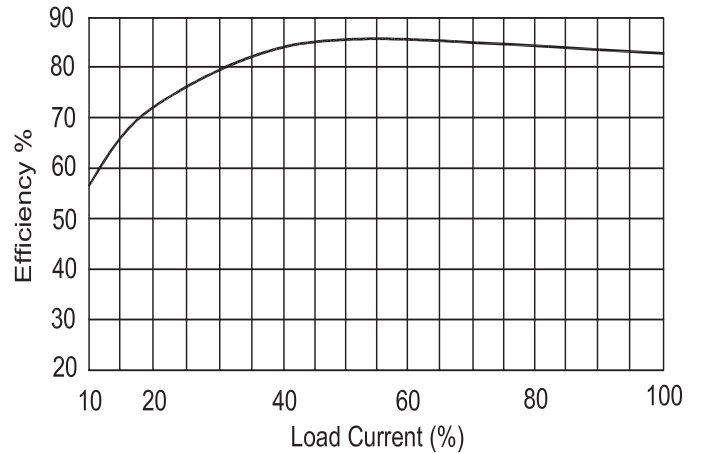


Efficiency Curves

Single Output

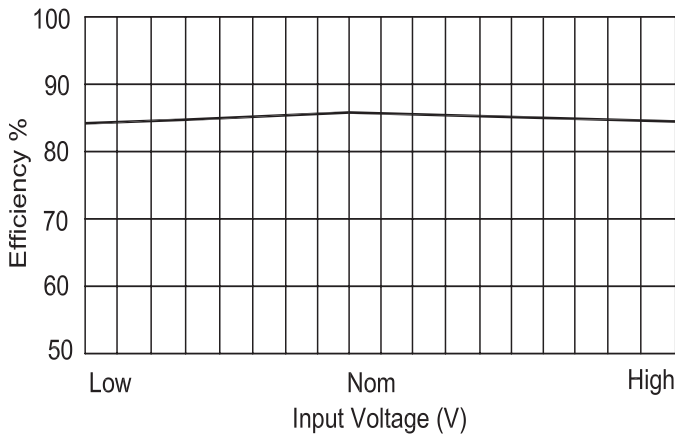


Efficiency vs Input Voltage

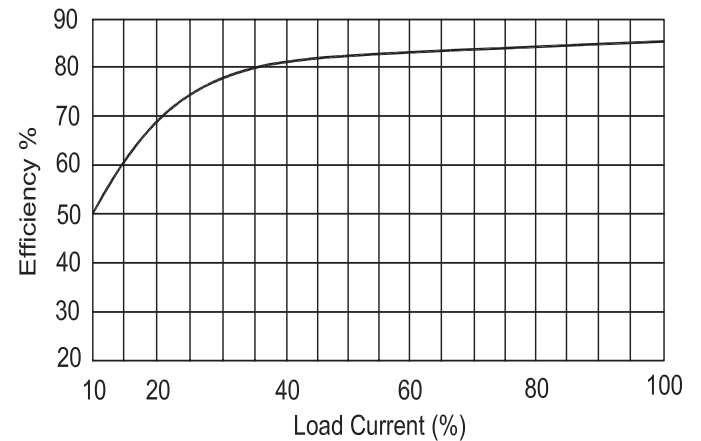


Efficiency vs Output Load

Dual Output



Efficiency vs Input Voltage



Efficiency vs Output Load