



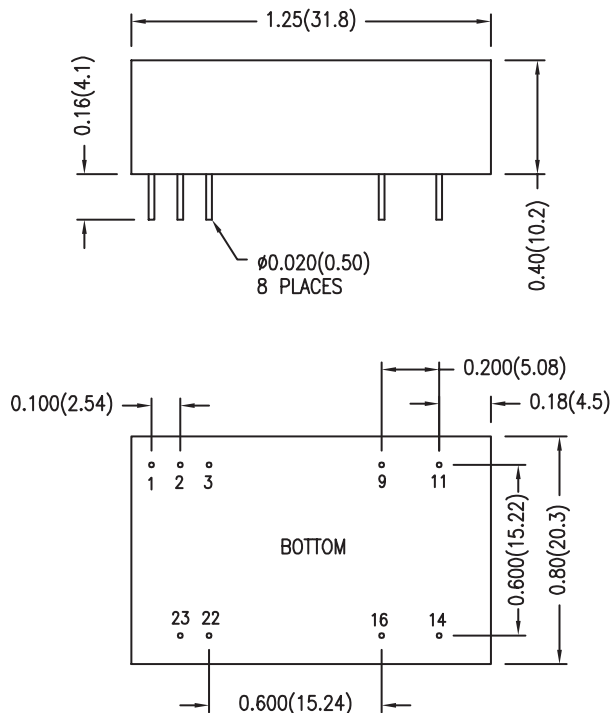
# 10 Watt DMT Single and Dual Series



- Efficiency up to 87%
- 1500VDC Isolation
- MTBF > 1,000,000 Hours
- 4:1 Input Range
- Over Voltage Protection
- Remote On/Off
- CSA Approved
- RoHS Compliant



Model Number	Voltage			Current			Reflected Ripple	1Input Overvoltage (1000ms)	Efficiency	Capacitive Load
	Input		Output	Input		Output				
	Nom. (VDC)	Range (VDC)	(VDC)	@ No Load (mA)	@ Max Load (mA)	Max (mA)				
DMT10H24S3R3	24	9-36	3.3	30	432	2700	40	50	86	1000 µF
DMT10H24S5	24	9-36	5	30	490	2000	40	50	85	1000 µF
DMT10H24S5R1	24	9-36	5.1	30	500	2000	40	50	85	1000 µF
DMT10H24S12	24	9-36	12	30	479	833	40	50	87	470 µF
DMT10H24S15	24	9-36	15	30	478	666	40	50	87	330 µF
DMT10H24S24	24	9-36	24	30	478	416	40	50	87	150 µF
DMT10H24D12	24	9-36	±12	30	478	±416	40	50	87	220 µF
DMT10H24D15	24	9-36	±15	30	478	±333	40	50	87	150 µF
DMT10H48S3R3	48	18-75	3.3	20	216	2700	30	100	86	1000 µF
DMT10H48S5	48	18-75	5	20	245	2000	30	100	85	1000 µF
DMT10H48S5R1	48	18-75	5.1	20	250	2000	30	100	85	1000 µF
DMT10H48S12	48	18-75	12	20	239	833	30	100	87	470µF
DMT10H48S15	48	18-75	15	20	236	666	30	100	87	330 µF
DMT10H48S24	48	18-75	24	20	244	416	30	100	87	150 µF
DMT10H48D12	48	18-75	±12	20	244	±416	30	100	87	220 µF
DMT10H48D15	48	18-75	±15	20	244	±333	30	100	87	150 µF



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

Pin Connections (NC) Not Connected		
Pin	Single	Dual
1	Remote On/Off	Remote On/Off
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

See Model Selection Table for Model Specific Parameters

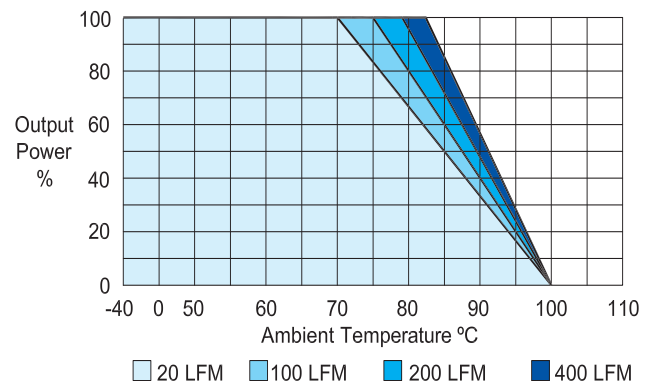
Input Parameters	Min	Typ	Max	Units	
Short Circuit Input Power			3000	mW	
Start Voltage	24 Vin 48 Vin	7 14	8 16	9 18	VDC
Under Voltage Shutdown	24 Vin 48 Vin			8.5 17	VDC
Switching Frequency		330		kHz	
Conducted EMI	Meets EN55022, Class A				
Output Parameters	Min	Typ	Max	Units	
Output Voltage Accuracy		±1	±2	%	
Output Voltage Balance Dual Output, Balanced Loads		±1.0	±2.0	%	
Load Regulation Io = 10% to 100%		±0.5	±1.2	%	
Line Regulation Vin=Min. to Max.		±0.5	±1.0	%	
Minimum Load	None Required				
Ripple & Noise (20MHz)			100	mV P-P	
Over Current Protection			150	% of Io max	
Transient Recovery Time 25% Load Step Change		300	600	µs	
Transient Response Deviation, 25% Load Step Change		±3	±5	%	
Temperature Coefficient		±0.01	±0.02	% / °C	
Short Circuit Protection	Hiccup Automatic Recovery				
General Specifications	Min	Typ	Max	Units	
Isolation Voltage, 60 seconds	1500			VDC	
Isolation Resistance 500VDC	1000			Mohms	
Isolation Capacitance, 100kHz, 1V		1000	1500	pF	
Operating Temperature (Ambient)	-40		+85	°C	
Case Temperature			+100	°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	17.3g				
Agency Approval	CSA 60950-1				

Remote On/Off	Min	Typ	Max	Units
Supply On	3.5V - 12V or Open Circuit			
Supply Off	0-1.2V or Short Circuit (Pin 1 and Pin 2)			
Device Standby Input Current			10	mA
Control Input Current (on) Vctrl=5V			500	µA
Control Input Current (off) Vctrl=0V			-500	µA
Control Common	Referenced to Negative Input			

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%.
- 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/appnotes.com](http://www.ConTech-us/appnotes.com).
- Specifications subject to change without notice.
- See ConTech website [www.ConTech-us.com/pdf/rohs.pdf](http://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 100°C.