



**75 Watt, 4:1 Wide Input
DC/DC Converters
Series DV75XL4**



Features

- 75 Watt Isolated Output
- Regulated Outputs
- 4 : 1 Wide Input Range
- 2250 VDC Isolation I/O
- Remote On/Off
- No Tantalum Capacitor Inside
- 2,05"x1,2"x0,4" Six-Sided Shield Metal Case
- Standard 2"x1" Pin Out
- Efficiency to 91%
- Fixed Switching Frequency
- Over Current Protection
- Input Under Voltage Protection
- Continuous Short Circuit Protection
- Full Load Operation Up to 54°C with Heat Sink M-C655 XL Natural Convection
- Safety Meets UL/EN/IEC62368-1

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	Iout Min. [mA]	Iout Max. [A]	INPUT CURRENT NO LOAD [mA] typ.	INPUT CURRENT FULL LOAD [mA] Typ.	EFF. [%] Typ. (2)	CAP. LOAD Max. [µF]	CASE
DV75XL4-24S05	9 – 36	5	0	15	10	3415	91	15000	XL
DV75XL4-24S12		12	0	6,25	10	3415	91	6250	
DV75XL4-24S15		15	0	5	10	3434	90	5000	
DV75XL4-24D12		±12	0	±3,12	12	3448	90	3200	
DV75XL4-24D15		±15	0	±2,5	13	3453	91	2500	
DV75XL4-24D24		±24	0	±1,56	18	3448	90	1560	
DV75XL4-48S05	18 – 75	5	0	15	8	1708	91	15000	XL
DV75XL4-48S12		12	0	6,25	8	1708	91	6250	
DV75XL4-48S15		15	0	5	8	1717	91	5000	
DV75XL4-48D12		±12	0	±3,12	8	1724	90	3200	
DV75XL4-48D15		±15	0	±2,5	8	1717	91	2500	
DV75XL4-48D24		±24	0	±1,56	8	1715	90	1560	

NOTE:

1. Nominal Input Voltage 24 or 48 Vdc
2. Measured at Nominal Input voltage
3. An external Input Capacitor 100µ for 48V Input Models and 220µF for 24V Input Models are Recommended to reduce Input Ripple Voltage.

INPUT SPECIFICATIONS:

Input Voltage Range.....	24V.....	9-36V
	48V.....	18-75V
Input Surge Voltage (100ms max.) ..	24V.....	50VDC max.
	48V.....	100VDC max.
Under voltage lockout: 24Vin power up.....		8,5V typ.
	24Vin power down.....	7,8V typ.
	48Vin power up.....	16V typ.
	48Vin power down.....	15V typ.
Input Filter.....		Pi Type
Positive Logic Remote ON/OFF Control.....		Note 1&2

OUTPUT SPECIFICATION:

Voltage Accuracy.....	±1,0% max.
Voltage Balance (Dual)	±1,0% max.
Transient Response: 75% - 100% Step Load Change	
Error Band	±5% Vout nominal
Recover Time	<250 µ sec.
Ripple and Noise, 20 MHz BW (Measured with 1µF MLCC):	
Vo=5V	100mV pk-pk max.
Vo=12V & 15V & ±12V & ±15V.....	150mV pk-pk max.
Vo=±24V	240mV pk-pk max.
Temperature Coefficient.....	±0,02%/°C
Line Regulation (From High Line to Low Line)	±0,2% max.
Load Regulation (From Full Load to Min. Load)	±0,5% max.
Cross Regulation (Dual) Load Cross Variation 10%/100%	±5% max.
Over Voltage Protection	Zener or TVS Clamp
Current Limit	110 - 160% Nominal Output
Short Circuit Protection	Continuous (Hiccup Mode)
External Trim Adj. Range (Single Output Only)	+10% to -20%
Start up time	30ms typ.

GENERAL SPECIFICATIONS:

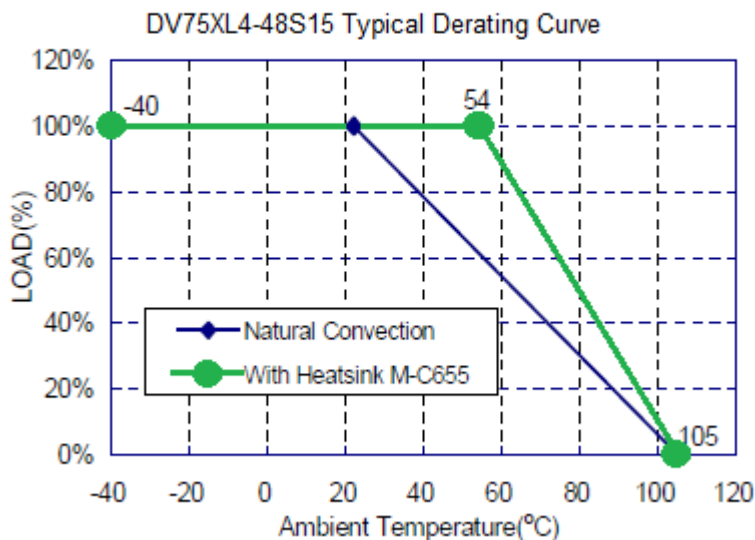
Efficiency	See Table
Isolation Voltage.....	Input/Output 2250 VDC min.
	Input/Case, Output /Case. 1600 VDC min.
Isolation Capacitance.....	Input/Output 1500 pF typ.
	Input/Case, Output /Case..... 1000 pF typ.
Isolation Resistance	10 ⁹ Ohm min.
Switching Frequency.....	Single 275KHz/Dual 330KHz typ.
EMI/RFI.....	Six-Sided Continuous Shield
Operating Ambient Temperature Range	-40°C to +85°C
Derating, above 22°C (Note 3)	Linearly to Zero Power at 105°C
Case Temperature (Note3)	105°C max.
Cooling.....	Natural Convection
Storage Temperature Range.....	-55°C to +125°C
Thermal Shutdown Case Temp.	110°C typ.
Humidity.....	95% RH max. Non condensing
MTBF	Single 5V 904Khrs / 12V 840 Khrs / 15V 995 Khrs typ.
	Dual ±12V 792Khrs / ±15V 998 Khrs / ±24V 691 Khrs typ.
Dimensions	52 x 30,5 x 10,2 mm
	(2,05 x 1,20 x 0,40 inches)
Case Material	Aluminum with Non-Conductive Base
Weight.....	39g

NOTE:

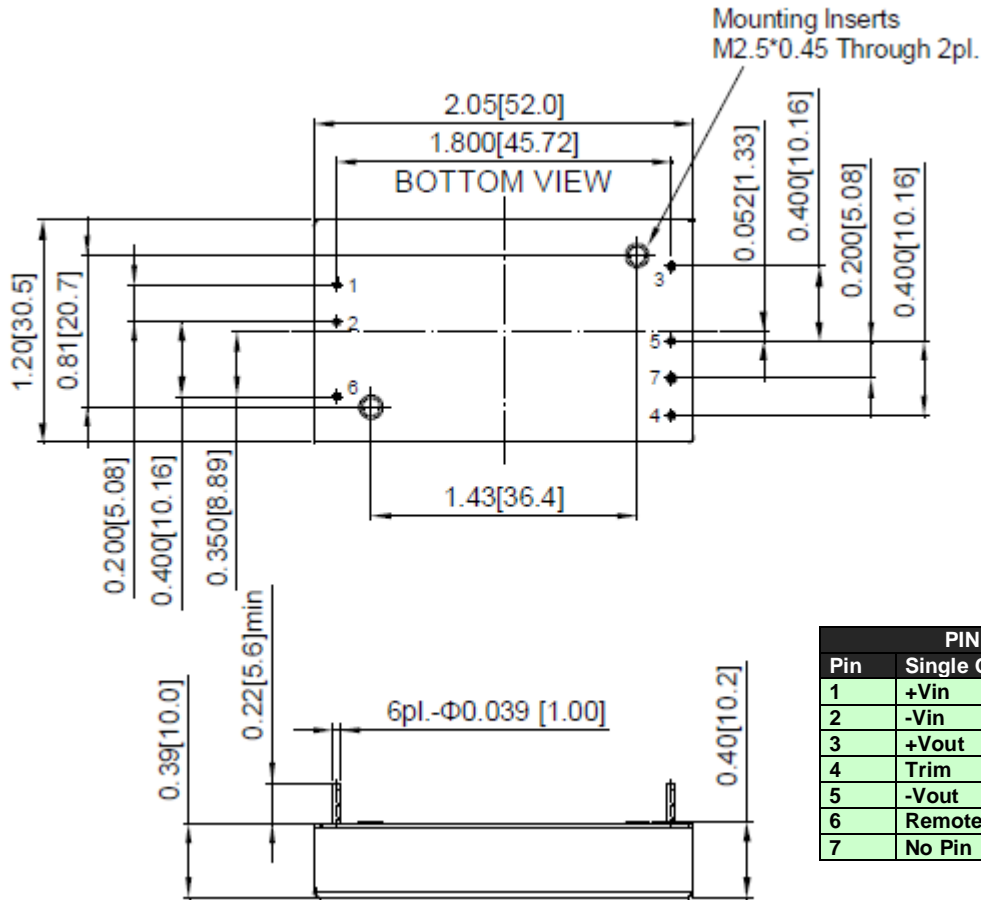
1. Logic Compatibility .. CMOS or Open Collector TTL, ref. to -Vinput
Module ON >3,5Vdc to 75Vdc or Open Circuit
Module OFF 0 to < 1,2Vdc
2. Suffix "N" to model number with negative Logic remote ON/OFF
Module ON Continuous (Hiccup Mode) 0 to < 1,2Vdc
Module OFF >3,5Vdc to 75Vdc or Open Circuit
3. Maximum Case Temperature under any operating condition should not be exceeded 105°C.
4. An external input capacitor 100uF for 48Vin models and 220uF for 24Vin models are recommended to reduce input ripple voltage.

All Specifications Typical at Nominal Line, Full Load and 25°C.

Derating Curve

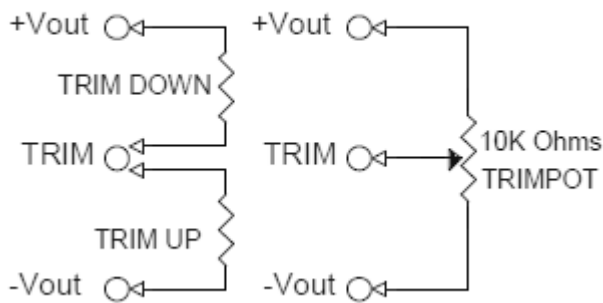


All Dimensions in Inches (mm)
 Tolerance x.xx= ±0.02 inches (x.x mm ±0.5mm)
 x.xxx in ±0.010 inches (x.xx mm ±0.25mm)



PIN CONNECTION		
Pin	Single Output	Dual Output
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	-Vout
5	-Vout	Common
6	Remote On/Off	Remote ON/OFF
7	No Pin	TRIM

External Output Trimming

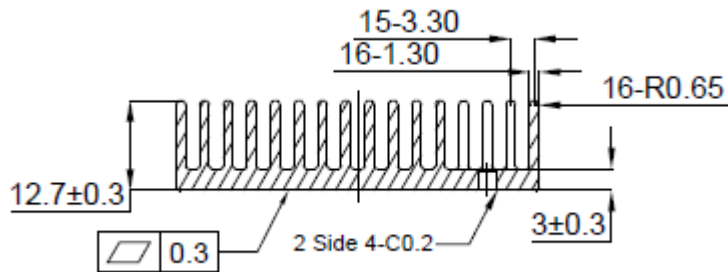
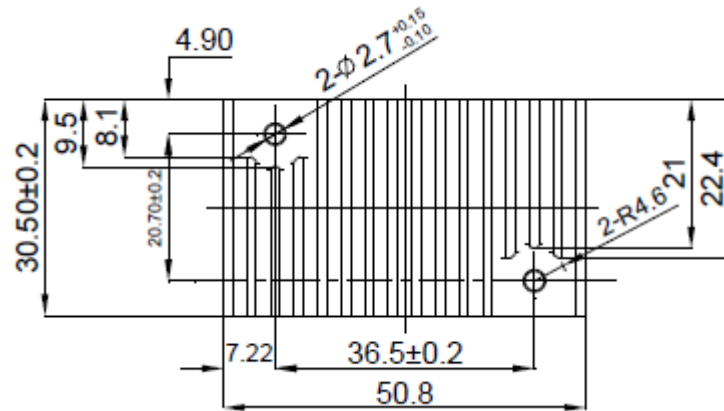


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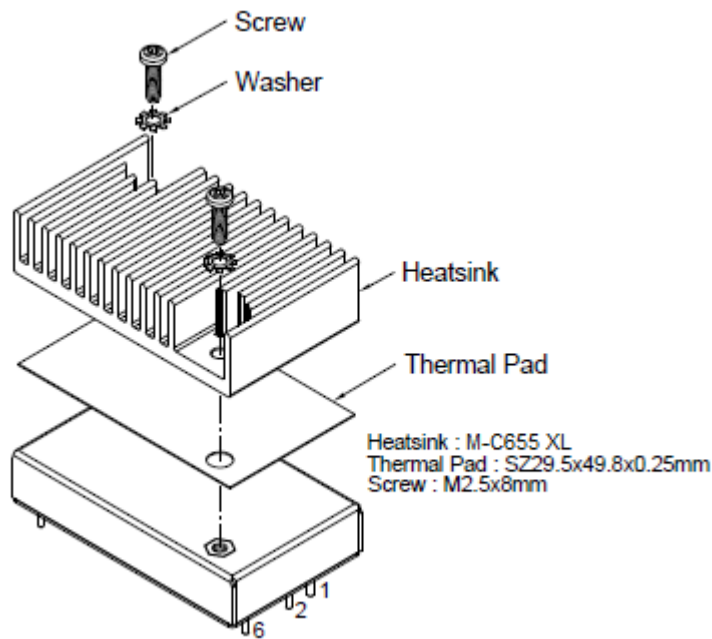
CASE XL: HEAT SINK

Transverse
 Order No. 17.079.204
 Model No. M-C655 XL

All dimensions in mm



Rca: 8,99°C/W (typ.), At natural convection



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