



**40 Watt, 4:1 Wide Input
DC/DC Converters
Series DV404XL**



Features



- 40 Watt Isolated Output
- Regulated Outputs
- 4 : 1 Wide Input Range
- 1500 VDC Isolation
- Remote On/Off
- No Tantalum Capacitor Inside
- 2,05" x 1,2" Six-Sided Shield Metal Case
- Efficiency to 91%
- Fixed Switching Frequency
- Over Current Protection
- Input Under Voltage Protection
- Continuous Short Circuit Protection
- CE Mark Meets 2004/108/EC
- Safety Meets UL60950-1, EN60950-1, IEC60950-1

MODEL NUMBER	INPUT VOLTAGE [VDC]	Vout [VDC]	Iout MAX. [mA]	INPUT CURRENT NO LOAD [mA]	INPUT CURRENT FULL LOAD [mA]	EFF. [%] (2)	EFF. [%] (3)	Cap. Load Max. [µF]	CASE
DV9-36-3,3S10000XL	9 – 36	3,3	10000	8	1528	90	88,5	10000	XL
DV9-36-05S8000XL		5	8000	8	1842	90,5	89,5	8000	
DV9-36-12S3333XL		12	3333	10	1832	91	90,5	3300	
DV9-36-15S2666XL		15	2666	10	1842	90,5	90,5	2700	
DV9-36-12D1667XL		±12	±1667	10	1873	89	89,5	1650	
DV9-36-15D1333XL		±15	±1333	10	1862	89,5	90	1350	
DV18-75-3,3S10000XL	18 – 75	3,3	10000	6	764	90	89	10000	XL
DV18-75-05S8000XL		5	8000	6	921	90,5	90	8000	
DV18-75-12S3333XL		12	3333	8	921	90,5	91,5	3300	
DV18-75-15S2666XL		15	2666	8	921	90,5	91	2700	
DV18-75-12D1667XL		±12	±1667	8	932	89,5	90	1650	
DV18-75-15D1333XL		±15	±1333	8	926	90	90,5	1350	

NOTE:

1. Nominal Input Voltage 24 or 48 Vdc
2. Measured at Nominal Input voltage
3. Measured at 12VDC for 24V Vin Models , at 24VDC for 48V Vin Models

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	24Vin power down.....8,0V
	48Vin power up.....17V	48Vin power down.....16V
Input Filter	Pi Type	
Remote ON/OFF Control	Note 1	

OUTPUT SPECIFICATION:

Output Current Min.	.....0mA
Voltage Accuracy:	.....±1,5% max.
Voltage Balance (Dual)	.....±1% max.
Transient Response: 75% - 100% Step Load Change	
Error Band	.....±5% Vout nominal
Recover Time	.....<250 µ sec.
External Trim Adj. Range (Single Output Only)	.....±10%
Ripple and Noise, 20 MHz BW (Measured with 1µF MLCC):	
3,3V & 5V	.....100mV pk-pk max.
12V & 15V & ±12V & ±15V	.....150mV pk-pk max.
Temperature Coefficient	.....±0,02%/°C
Short Circuit Protection	.....Continuous (Hiccup Mode)
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 Vout) Load Variation 10%/100% .	±5% max.
Over Voltage Protection	.....Zener or TVS Clamp
Current Limit	.....110 - 160% Nominal Output
Start up time	.....15ms typ.

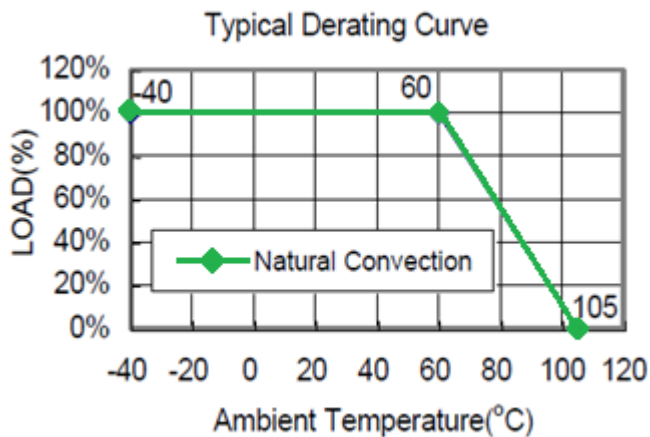
GENERAL SPECIFICATIONS:

Efficiency	..... See Table
Isolation Voltage	..... Input/Output 1500 VDC min.
	..... Input/Case 1000 VDC min.
	..... Output/Case 1000 VDC min.
Isolation Capacitance	..... Input/Output 1500 pF typ.
	..... Input/Case 1000 pF typ.
	..... Output/Case 1000 pF typ.
Isolation Resistance	..... 10 ⁹ Ohm min.
Switching Frequency	..... 300KHz typ.
EMI/RFI	..... Six-Sided Continuous Shield
Operating Ambient Temperature Range	..... -40°C to +85°C
Derating, above 60°C	..... Linearly to Zero Power at 105°C
Case Temperature (Note 2)	..... 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
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	..... 36 g

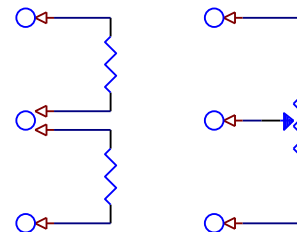
NOTE:

- Logic Compatibility CMOS or Open Collector TTL, ref. to -Vinput
- Module ON >3,5Vdc to 75Vdc or Open Circuit
- Module OFF < 1,2Vdc
- Maximum case temperature under any operating condition should not be exceeded 105°C.

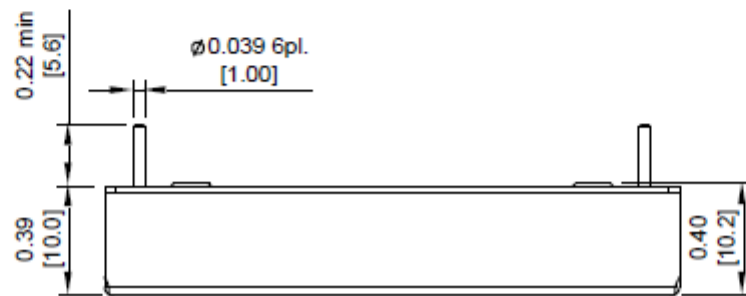
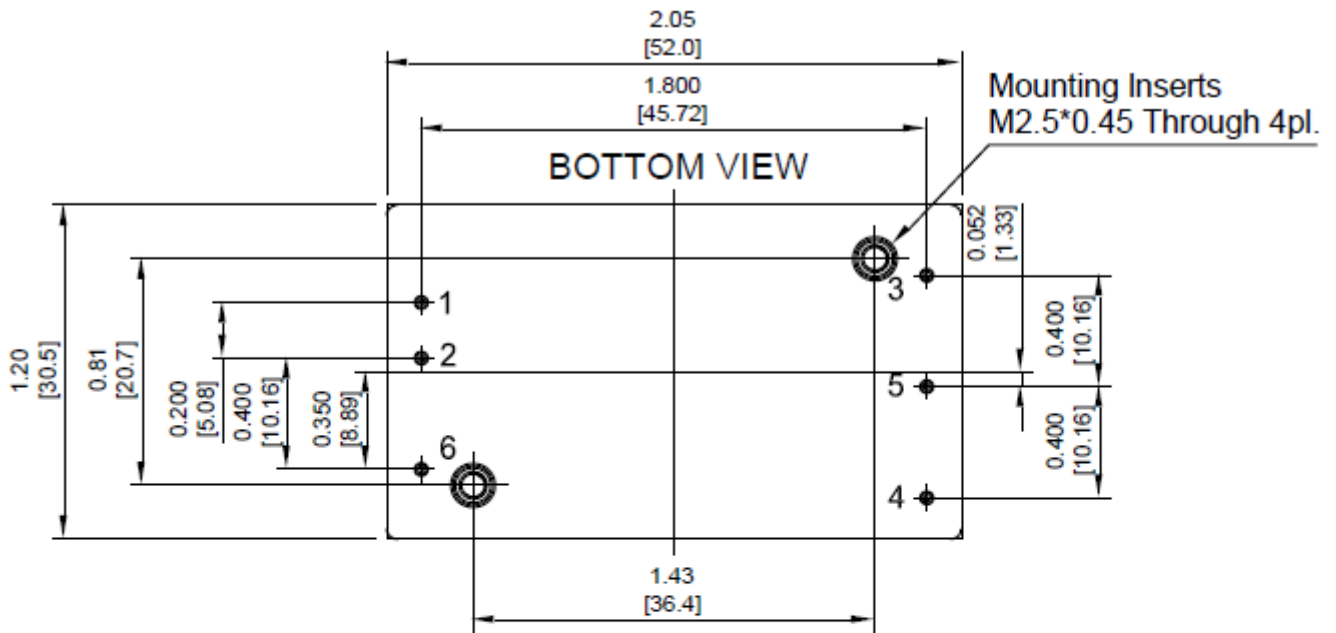
All Specifications Typical at Nominal Line, Full Load and 25°C.



External Output Trimming



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

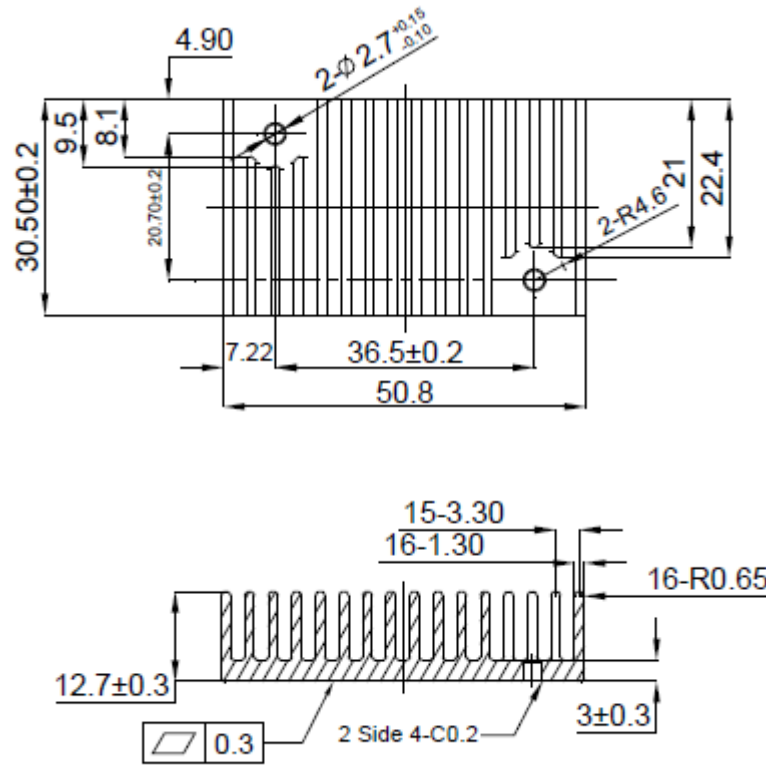


PIN CONNECTION		
Pin	Single Output	Dual Output
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	-Vout
5	-Vout	Common
6	On/Off	On/Off

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

Heat Sink Assembly example

