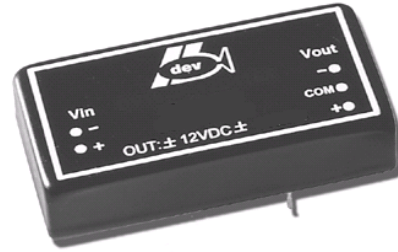




15 Watt, 2:1 Wide Input DC/DC Converters Series DV152XU



Features

- 15 Watt Isolated Output Regulated
- 2:1 Wide Input Range
- Input Under Voltage Protection
- Continuous Short Circuit Protection
- Over Current Protection
- Safety Meets UL60950-1, EN60950-1 and IEC60950-1
- Efficiency to 90%
- Fixed Switching Frequency
- Without Tantalum Capacitors Inside
- CE Mark Meets 2004/108/EC
- Conductive EMI Meets EN55022 Class A

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	I _{out} MIN [mA]	I _{out} MAX [mA]	INPUT CURRENT NO LOAD [mA]	INPUT CURRENT FILL LOAD [mA]	EFF. [%]	C LOAD MAX. [µF]	CASE
DV9-18-3,3S4000XU	9 – 18	3,3	0	4000	90	1280	85	4000	X
DV9-18-05S3000XU		5		3000	85	1453	88	3000	
DV9-18-12S1250XU		12		1250	70	1420	88	1330	
DV9-18-15S1000XU		15		1000	70	1420	88	1000	
DV9-18-05D1500XU		±5		±1500	45	1470	85	1470	
DV9-18-12D625XU		±12		±625	45	1436	87	660	
DV9-18-15D500XU		±15		±500	45	1420	88	550	
DV18-36-3,3S4000XU	18 – 36	3,3	0	4000	50	640	86	4000	X
DV18-36-05S3000XU		5		3000	50	718	89	3000	
DV18-36-12S1250XU		12		1250	20	695	90	1330	
DV18-36-15S1000XU		15		1000	20	695	90	1000	
DV18-36-05D1500XU		±5		±1500	25	726	86	1470	
DV18-36-12D625XU		±12		±625	25	710	88	660	
DV18-36-15D500XU		±15		±500	25	702	89	550	
DV36-75-3,3S4000XU	36 – 75	3,3	0	4000	25	320	86	4000	X
DV36-75-05S3000XU		5		3000	30	359	88	3000	
DV36-75-12S1250XU		12		1250	20	347	90	1330	
DV36-75-15S1000XU		15		1000	20	351	90	1000	
DV36-75-05D1500XU		±5		±1500	20	363	86	1470	
DV36-75-12D625XU		±12		±625	20	355	88	660	
DV36-75-15D500XU		±15		±500	20	351	89	550	

NOTE 1: Nominal Input Voltage 12,24 or 48VDC

INPUT SPECIFICATIONS:

Input Voltage Range.....	12V.....	9-18V
	24V.....	18-36V
	48V.....	36-75V
Input Surge Voltage (100ms max.).....	12V.....	25Vdc max.
	24V.....	50Vdc max.
	48V.....	100Vdc max.
Under Voltage lockout.....	12Vin power up: 8,4V.....	power down 8,0V
	24Vin power up: 17V.....	power down 16V
	48Vin power up: 34.....	power down 32V
Input Filter.....		Pi Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy.....		±1,5% max.
Voltage Balance (Dual).....		±2,0% max.
Transient Response: 25% Step Load Change.....		<500us
Ripple & Noise, 20 MHz BW (Measured with 0,1uF MLCC).....		100mV p-p max.
Temperature Coefficient.....		±0,03%/°C
Output Short Circuit Protection.....		Continuous
Line Regulation (Measured From High Line to Low Line).....	Single.....	±0,2 % max.
	Dual.....	±0,5 % max.
Load Regulation (Measured From Full Load to Min. Load).....	Single.....	±0,2 % max.
	Dual.....	±1,0 % max.
Cross Regulation (Dual Output).....	Load cross variation 10% / 100%.....	±5 % max.
Over Voltage Protection.....		Zener or TVS Clamp
Current Limit.....		110% - 140% Nominal Output
External Trim Adj. Range.....	Single Output Only.....	Option
Start up Time.....		20ms typ.

GENERAL SPECIFICATIONS:

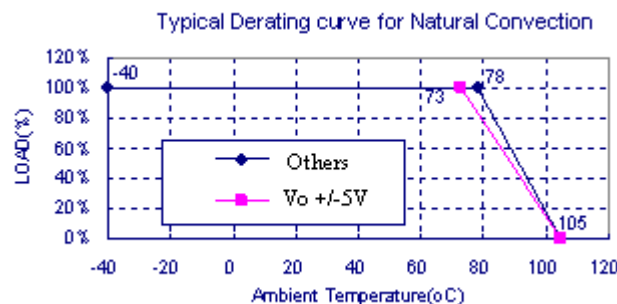
Efficiency.....		See Table
Isolation Voltage Input/Output.....		1500VDC min.
Isolation Resistance.....		10 ⁹ Ohms min.
Isolation Capacitance.....		1000pF typ.
Switching Frequency.....		350KHz, typ.
Operating Ambient Temperature Range.....		-40°C to +85°C
Derating, above 78°C.....		Linearly to Zero Power at +105°C
Case Temperature (Note3).....		105°C max.
Storage Temperature Range.....		-55°C to +125°C
Cooling.....		Natural Convection
Humidity.....		95% RH max. Non condensing
EMI / RFI (Conductive).....		Meet EN55022 Class A
Case Grounding.....		Connect Case to -Vin with Decoupling Y Cap
Safety meets.....		UL60950-1, EN60950-1, IEC60950-1
MTBF (MIL-STD-217-F, GB, 25°C, Full Load).....		1200k hrs
Dimensions.....		2,00 x 1,00 x 0,40 inches (50,8 x 25,4 x 10,2 mm)
Weight.....		35 g
Case Material.....		Black Coated Copper with Non-Conductive Base

OPTION:

- Suffix "R"** to the Model Number with Positive Logic Remote ON/OFF
 Logic Compatibility.....CMOS or Open Collector TTL, Referenced to -Vin
 Module OFF.....<1.2Vdc
 Module ON.....>5.5Vdc to 75Vdc or Open Circuit
- Suffix "T"** to the Model Number with Output Voltage Adjustable.....External Trim Adj. Range ≥±10%, Single Output Only

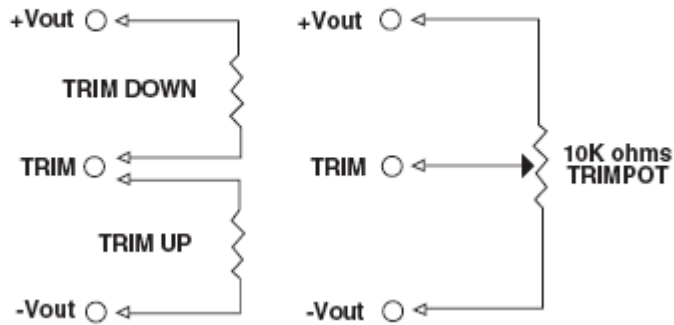
NOTE:

- Maximum case temperature under any operating condition should not be exceeded 105°C.



External Output Trimming

Output may optionally be externally trimmed ($\pm 10\%$) with a fixed resistor or an external trimpot as shown.



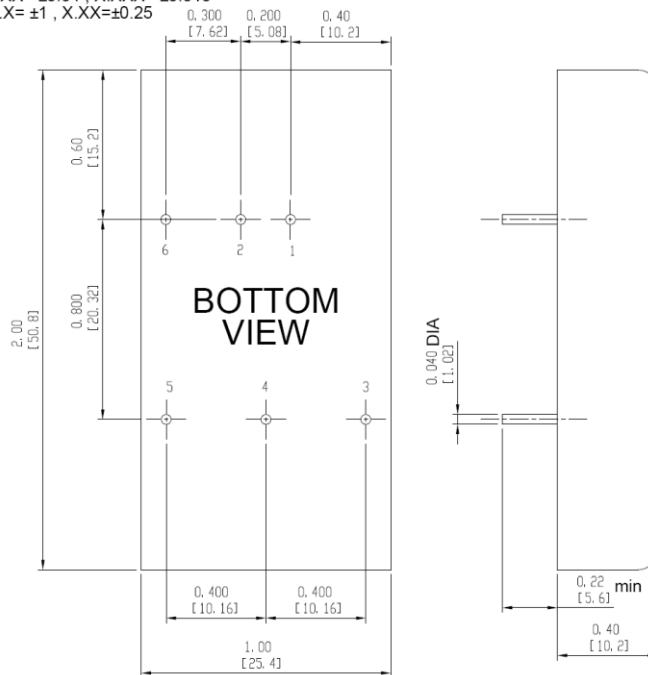
CASE X

Series DV152XU

All Dimensions In Inches (mm)

Tolerances Inches: X.XX= ± 0.04 , X.XXX= ± 0.010

Millimeters: X.X= ± 1 , X.XX= ± 0.25



PIN CONNECTION		
Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin/(Option Trim)	Common
5	-Vout	-Vout
6	No Pin/(Option Remote ON/OFF)	No Pin/(Option Remote ON/OFF)

Technische Änderungen vorbehalten / Specifications are subject to change without notice