



13 - 15 Watt, 2:1 Wide Input DC/DC Converters Series DV152A



Features

- 13 – 15 Watt Isolated Output
- Regulated Outputs
- 2:1 Wide Input Range
- Industry Standard 1"x1" Packages
- Efficiency to 90%
- CE Mark Meets 2004/108/EC
- Safety Meets UL60950-1, EN60950-1, IEC60950-1
- I/O Isolation 1500 VDC
- Input Under-Voltage Protection
- Continuous Short Circuit Protection
- Over Current Protection
- Without Tantalum Capacitors Inside
- Remote ON/OFF

MODEL NUMBER	INPUT VOLTAGE [VDC]	Vout [VDC]	OUTPUT CURRENT Min.[mA]	OUTPUT CURRENT Max. [mA]	INPUT CURRENT NO LOAD [mA]	INPUT CURRENT FULL LOAD [mA]	EFF. [%]	CAPACITOR LOAD MAX. [µF]	CASE
DV9-18-3,3S4000A	9 – 18	3,3	0	4000	90	1280	85	4000	A
DV9-18-05S3000A		5	0	3000	85	1453	88	3000	
DV9-18-12S1250A		12	0	1250	70	1420	88	1330	
DV9-18-15S1000A		15	0	1000	70	1420	88	1000	
DV9-18-05D1500A		±5	0	±1500	45	1470	85	1470	
DV9-18-12D625A		±12	0	±625	45	1436	87	660	
DV9-18-15D500A		±15	0	±500	45	1420	88	550	
DV18-36-3,3S4000A	18 – 36	3,3	0	4000	50	640	86	4000	A
DV18-36-05S3000A		5	0	3000	50	718	89	3000	
DV18-36-12S1250A		12	0	1250	20	695	90	1330	
DV18-36-15S1000A		15	0	1000	20	695	90	1000	
DV18-36-05D1500A		±5	0	±1500	25	726	86	1470	
DV18-36-12D625A		±12	0	±625	25	710	88	660	
DV18-36-15D500A		±15	0	±500	25	702	89	550	
DV36-75-3,3S4000A	36 – 75	3,3	0	4000	25	320	86	4000	A
DV36-75-05S3000A		5	0	3000	30	359	88	3000	
DV36-75-12S1250A		12	0	1250	20	347	90	1330	
DV36-75-15S1000A		15	0	1000	20	351	90	1000	
DV36-75-05D1500A		±5	0	±1500	20	363	86	1470	
DV36-75-12D625A		±12	0	±625	20	355	88	660	
DV36-75-15D500A		±15	0	±500	20	351	89	550	

Note: 1. Nominal Input Voltage: 12, 24 or 48Vdc

For SMD Versions please see datasheet of series DVS152A

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INPUT SPECIFICATIONS:

Input Voltage Range	See Table
Under Voltage lockout	12Vin power up 9,0VDC typ.
	12Vin power down 8,0VDC typ.
	24Vin power up 17VDC typ.
	24Vin power down 16VDC typ.
	48Vin power up 34V typ.
	48Vin power down 32V typ.
Input Surge Voltage (100mS max.)	Input 12Vdc, 25Vdc max.
	Input 24Vdc, 50Vdc max.
	Input 48Vdc, 100Vdc max.
Input Filter	PI Type
Positive Logic Remote ON/OFF Control:	
Logic Compatibility	CMOS or Open Collector TTL
Module ON	>+5,5VDC to 75VDC or Open Circuit
Module OFF	<1,2VDC

OUTPUT SPECIFICATIONS:

Voltage Accuracy	±1,5%max.
Voltage Balance (Dual)	±2,0%max.
Transient Response	25% Step Load Change <500µ sec.
Temperature Coefficient	0,03%/°C max.
Ripple and Noise, 20 MHz BW (Note 3)	50mV p-p max.
Short Circuit Protection	continuous
Line Regulation (Note 1)	Single ±0,2% max.
	Dual ±0,5% max.
Load Regulation (Note 2)	DIP 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
External Trim Adj. Range	±10%
Current Limit	110% - 140% Nominal Output
Start up time	20ms. max.

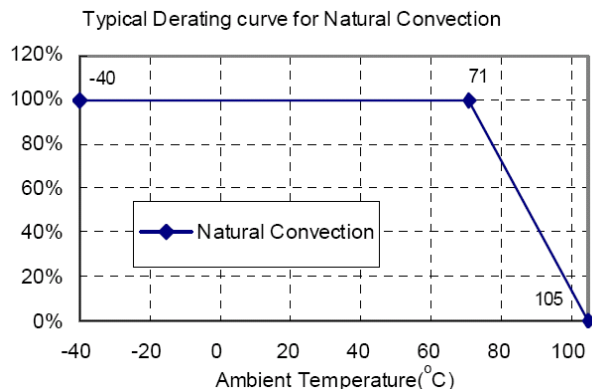
GENERAL SPECIFICATIONS:

Efficiency	See Table
Isolation Voltage I/O	1500 VDC min.
Isolation Resistance	10 ⁹ Ω min.
Isolation Capacitance	1000pF typ.
Switching Frequency	350KHz, min.
Operating Ambient Temperature Range	-40°C to +85°C
Derating above 71°C	Linearly to Zero Power at 105°C
Case Temperature (Note 4)	105°C
Cooling	Natural Convection
Storage Temperature Range	-55°C to +125°C
Humidity	95% RH max. Non condensing
MTBF (MIL-STD-217-F, GB, 25°C, Full Load)	1200k hrs
Dimensions	DIP CASE 1,00 x 1,00 x 0,4 inches (25,4 x 25,4 x 10,2 mm)
Weight	18,4 g
Material	Black Coated Copper with Non-Conductive Base

Note:

1. Measured from High line to Low line
2. Measured from Full Load to Min. Load
3. The Output Ripple and Noise is Measured with 10µF Tantalum and 1µF Ceramic Capacitor Across Output
4. Maximum case temperature under any operating condition should not be exceeded 105°C
5. Suffix "S" to the Model Number (DVS...) with SMD Package

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

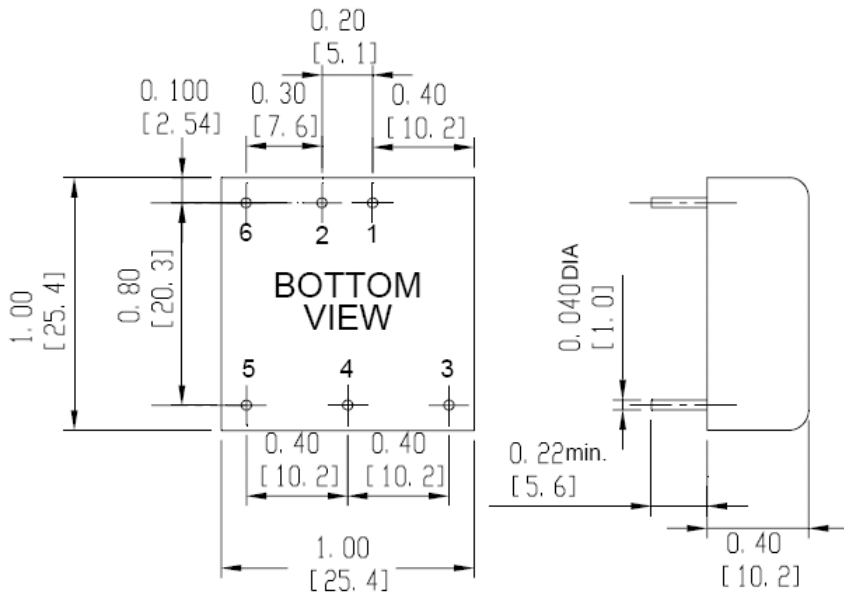


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CASE A

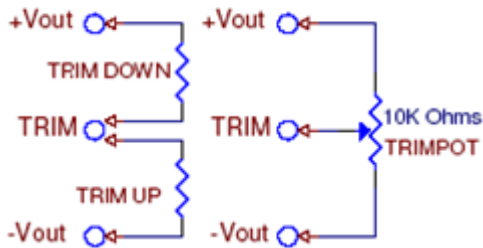
All Dimensions in Inches (mm)

Tolerance x.xx=±0.02(x.x = ±0.5mm) ; x.xxx=±0.010(x.xx = ±0.25mm)



PIN CONNECTION DV152A		
Pin	DIP CASE	
	Single	Dual
1	+V Input	+V Input
2	-V Input	-V Input
3	+V Output	+V Output
4	Trim	Common
5	-V Output	-V Output
6	Remote ON/OFF	Remote ON/OFF

EXTERNAL OUTPUT TRIM



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