



20 Watt, 2:1 Wide Input DC/DC Converters Series DV202X



Features

- 20 Watt Isolated Output Regulated
- 2:1 Input Range
- Pi Input Filter
- UL60950-1 Approval
- Efficiency to 90%
- Fixed Switching Frequency
- Continuous Short Circuit Protection
- Safety Meets IEC/EN/UL 62368-1

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT MIN [mA]	OUTPUT CURRENT MAX [mA]	INPUT CURRENT NO LOAD [mA]	INPUT CURRENT FULL LOAD [mA]	EFF. [%]	CAP. LOAD MAX. [µF]	CASE			
DV9-18-12D835XS	9 – 18	±12	42	±835	40	1856	90	1000	X			
DV9-18-15D670XS		±15	33	±670	40	1861	90	800				
DV18-36-1,8S6000XS	18 – 36	1,8	0	6000	30	523	86	6000	X			
DV18-36-2,5S6000XS		2,5		6000	30	710	88	6000				
DV18-36-3,3S5000XS		3,3		5000	40	764	90	5000				
DV18-36-05S4000XS		5		4000	60	926	90	4000				
DV18-36-12S1670XS		12		1670	20	928	90	2000				
DV18-36-15S1330XS		15		1330	20	924	90	2000				
DV18-36-12D835XS		±12		42	±835	20	928	90		1000		
DV18-36-15D670XS		±15		33	±670	20	930	90		800		
DV36-75-1,8S6000XS		36 – 75		1,8	0	6000	30	262		86	6000	X
DV36-75-2,5S6000XS				2,5		6000	30	359		87	6000	
DV36-75-3,3S5000XS	3,3		5000	30		386	89	5000				
DV36-75-05S4000XS	5		4000	40		463	90	4000				
DV36-75-12S1670XS	12		1670	15		469	89	2000				
DV36-75-15S1330XS	15		1330	15		472	88	2000				
DV36-75-12D835XS	±12		42	±835		10	464	90	1000			
DV36-75-15D670XS	±15		33	±670		10	471	89	800			

Technische Änderungen vorbehalten / Technical change reserved

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.....	8,8V
	12Vin power down.....	8,0V
	24Vin power up.....	17V
	24Vin power down.....	16V
	48Vin power up.....	34V
	48Vin power down.....	33V
Input Filter.....		Pi Type
Positive Logic Remote On/Off Control:		
Logic Compatibility CMOS or Open Collector TTL,ref.to - Vin		
Module ON.....	>5.5Vdc or Open Circuit	
Module OFF.....	<1.2Vdc	

OUTPUT SPECIFICATIONS:

Voltage Accuracy.....		±1,5%max.
Voltage Balance (Dual).....		±2,0%max.
Transient Response: 75%-100%Step Load Change.....	Error Band.....	±5% Vout nominal,
	Recovery Time.....	<500us
Ripple and Noise, 20 MHz BW (Measured with 0,1uF MLCC).....		75mV 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 10% Load).....		±1,0%max.
Over Voltage Protection.....		Zener or TVS Clamp
External Trim Adj. Range.....	Single.....	±10%
Start up Time.....	Vin 24V/Vout12V&15V.....	13ms typ.
	Vin 48V/Vout12V&15V.....	22ms typ.
	Other.....	5ms typ.

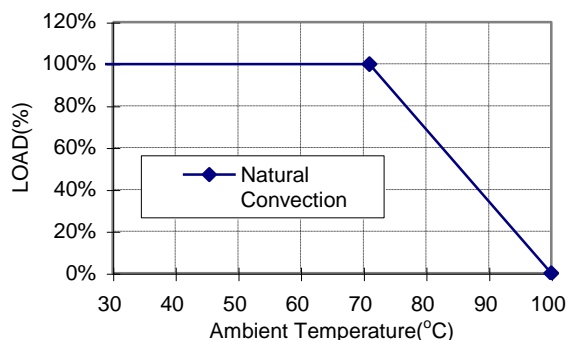
GENERAL SPECIFICATIONS:

Efficiency.....		See Table
Isolation Voltage Input/Output.....		1500VDC min.
Isolation Resistance.....		10 ³ ohms min.
Isolation Capacitance.....		1000pF typ.
Switching Frequency.....		350KHz, typ.
Operating Ambient Temperature.....		-40°C to +85°C
Derating, above 71°C.....		Linearly to Zero Power at +100°C
Case Temperature.....		100°C max.
Storage Temperature Range.....		-55°C to +125°C
Cooling.....		Natural Convection
Humidity.....		95% RH max. Non Condensing
MTBF (MIL-STD-217-F, GB, 25°C, Full Load).....	Single.....	900Khrs typ.
	Dual.....	740Khrs typ.
EMI / RFI.....		Six Sided Continuous Shield
Dimensions.....		2,00 x 1,00 x 0,40 inches (50,8 x 25,4 x 10,2 mm)
Case Material.....		Black Coated Copper with Non-Conductive Base
Weight.....		35 g

Note:

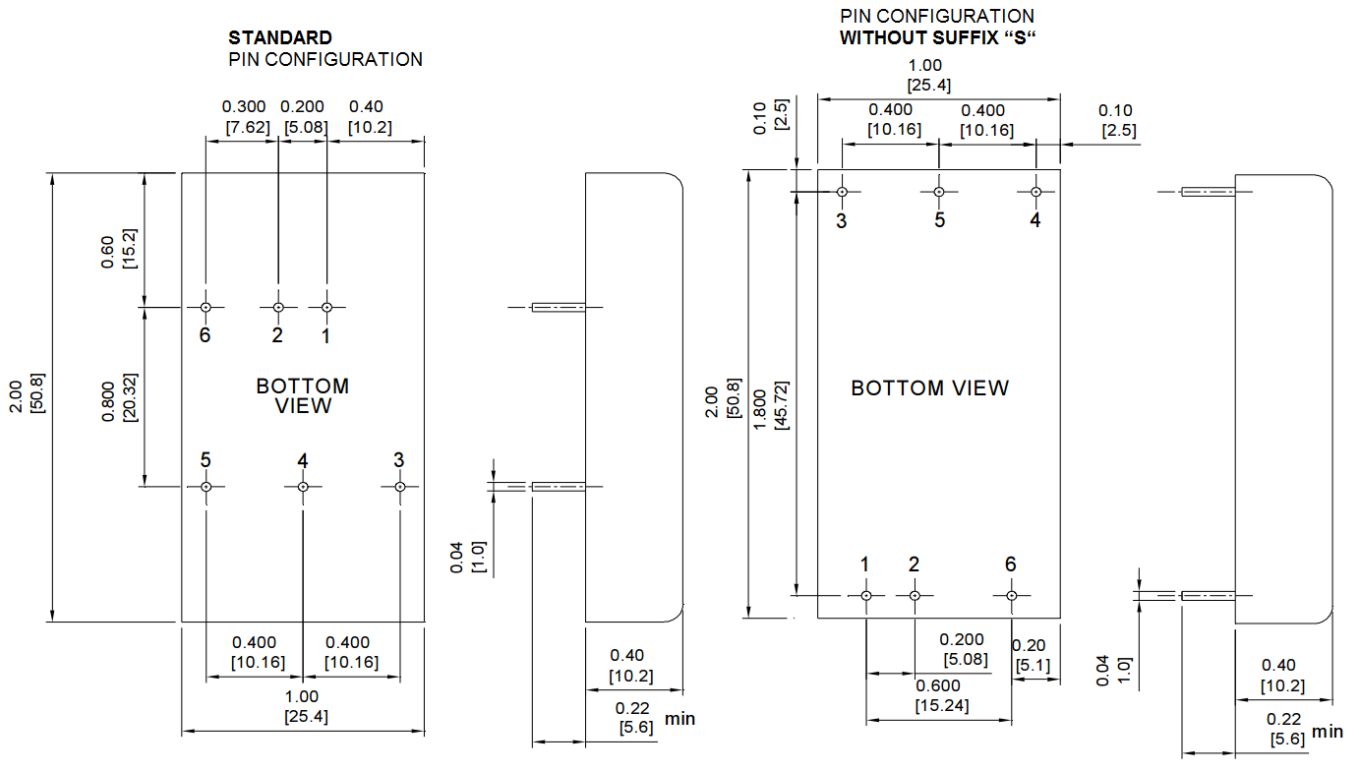
- Suffix WITHOUT "S" to the Model Number with Alternative Pin Configuration, Single output models only.
- Suffix "N" to the Model Number Negative Logic Remote ON/OFF
Module ON..... <1.2Vdc
Module OFF..... >+5.5Vdc or Open Circuit
- All Specifications Typical at Nominal Line, Full Load, and 25°C Unless Otherwise Noted.
- Maximum case temperature under any operating condition should not be exceeded 100°C.

Typical Derating curve for Natural Convection



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All Dimensions In Inches (mm)
 Tolerances Inches: X.XX= ±.04 , X.XXX= ±.010
 Millimeters: X.X= ±1.0 , X.XX= ±0.25
 NOTE: Pin Size is 0.04±0.004 Inch (1.0±0.1 mm)DIA



PIN CONNECTION		
Pin	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

