



75 Watt, 4:1 Wide Input Range DC/DC Converters Series DV754Q



Features

- 75 Watt Isolated Output
- Regulated Outputs
- 4 : 1 Wide Input Range
- Continuous Short Circuit Protection
- Safety Meets EN60950-1, and IEC60950-1
- Efficiency to 87%
- 300 KHz Switching Frequency
- Industry Standard Quarter-Brick Package
- CE Mark Meets 2004/108/EC
- UL60950-1 Approval

MODEL NUMBER	INPUT VOLTAGE [VDC]	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT MAX. [A]	INPUT CURRENT NO LOAD TYP. [mA]	INPUT CURRENT FULL LOAD TYP. [mA]	EFF. [%]	POWER MAX. [W]	CAP. Load [μ F]	CASE
DV9-36-3,3SA12Q	9 – 36	3,3	12	50	2037	81	40	12000	Q
DV9-36-05SA12Q		5	12	50	2976	84	60	12000	
DV9-36-12SA6,25Q		12	6,25	50	3634	86	75	6250	
DV9-36-15SA5Q		15	5	50	3634	86	75	4400	
DV9-36-24SA3,12Q		24	3,12	50	3628	86	75	1500	
DV18-75-3,3SA12Q	18 – 75	3,3	12	30	1006	82	40	12000	
DV18-75-05SA12Q		5	12	30	1471	85	60	12000	
DV18-75-12SA6,25Q		12	6,25	30	1817	86	75	6250	
DV18-75-15SA5Q		15	5	30	1796	87	75	4400	
DV18-75-24SA3,12Q		24	3,12	30	1796	87	75	1500	

NOTE: 1. Nominal Input Voltage 24 or 48 Vdc

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.....	8,8V
	24Vin power down.....	8,0V
	48Vin power up.....	17V
	48V power down.....	16V
Input Filter.....		Pi Type
Positive Logic Remote ON/OFF Control		Note 4 & 5

OUTPUT SPECIFICATIONS:

Voltage Accuracy:		±1,5% max.
Transient Response: 75% - 100% Step Load Change.....	Error Band.....	±5% Vout
	Recover Time.....	<500 µ sec.
	External Trim Adj. Range.....	±10%
Ripple and Noise, 20 MHz BW:	3,3V & 5V.....	40mV RMS. / 100mV pk-pk max.
	12V & 15V.....	60mV RMS. / 150mV pk-pk max.
	24V.....	100mV RMS. / 240mV pk-pk max.
Temperature Coefficient.....		±0,03%/°C
Short Circuit Protection.....		Continuous
Line Regulation (From High Line to Low Line)		±0,2% max.
Load Regulation (From Full Load to Zero Load)		±0,2% max.
Over Voltage Protection trip Range, % Vo nom		115 – 140%
Current Limit.....		110 - 140% Nominal Output
Start up Time.....		20ms typ.

GENERAL SPECIFICATIONS:

Efficiency.....		See Table
Isolation Voltage.....	Input/Output.....	1500 VDC min.
	Input/Case.....	1500 VDC min.
	Output/Case.....	1500 VDC min.
Isolation Resistance		10 ⁷ Ohm min.
Isolation Capacitance		1000pF typ.
Switching Frequency		300KHz typ.
Operating Case Temperature		-40°C to +100°C
Storage Temperature Range		-55°C to +105°C
Thermal Shutdown Case Temp.		105°C typ.
Humidity		95% RH max. Non condensing
Dimensions		1,45 x 2,28 x 0,50 inches (36,8 x 57,9 x 12,7 mm)
Weight.....		63 g
Case Material		Aluminum Base-plate with Plastic Case

Note:

3. Output Ripple and Noise measured with 10uF tantalum and 1uf Ceramic capacitor across output.
4. Logic Compatibility

 - Module ON
 - Module OFF

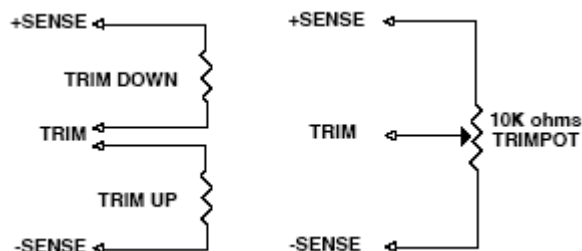
5. Suffix "N" to Model Number with Negative Logic Remote On/Off

 - Module ON
 - Module OFF

6. Suffix "-C" to the Model Number with Clear Mounting Insert (3.1mm DIA)

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

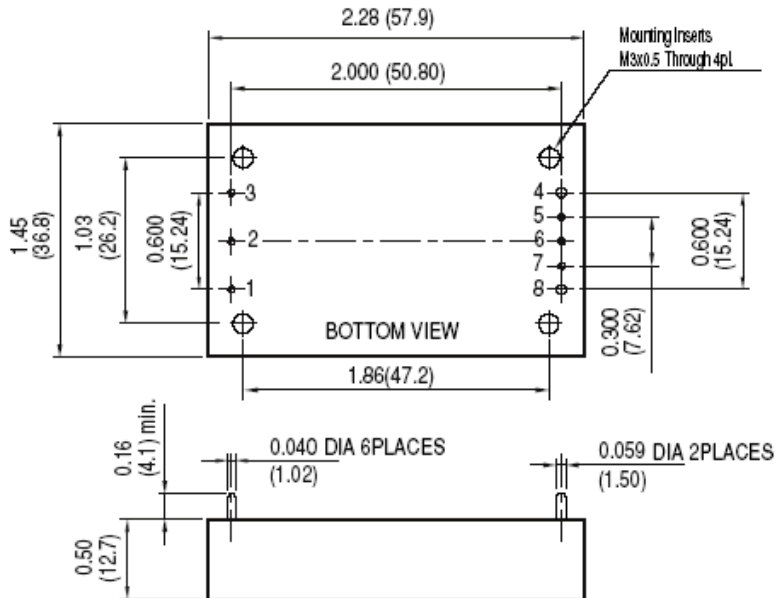
OUTPUT TRIM



Technische Änderungen vorbehalten / Technical change reserved

All Dimensions in mm (inches)

Tolerance	Inches	.xx±0.02	.xxx±0.010
	Millimeters	.x±0.5	.xx±0.25



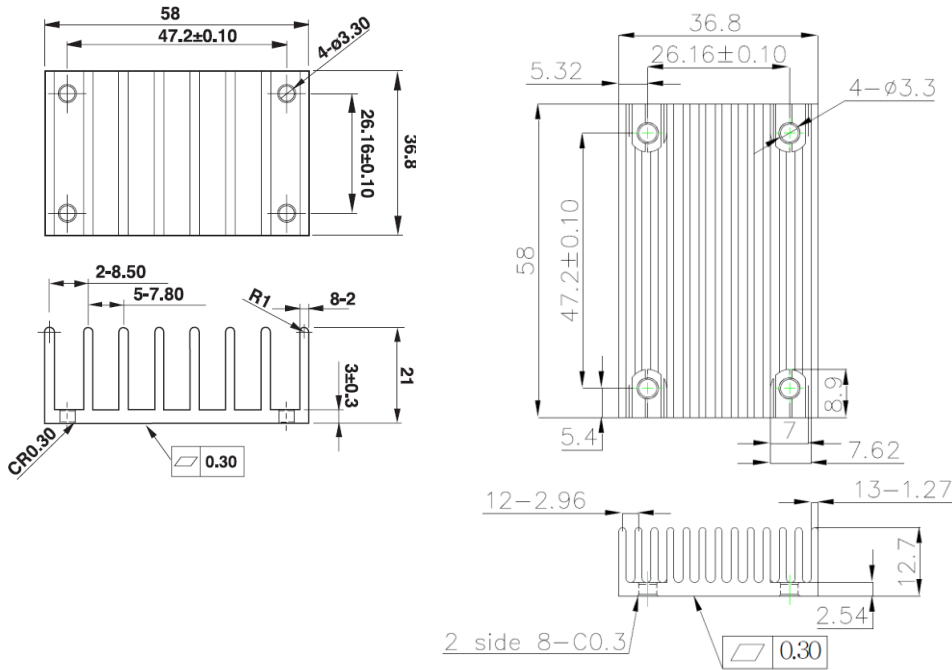
PIN CONNECTION	
Pin	Function
1	+Vin
2	ON/OFF
3	- Vin
4	-Vout
5	-Sense
6	Trim
7	+Sense
8	+Vout

Heat Sink Case Q

CASE Q: HEAT SINK

Vertical Fins
Order No. 17.079.206
Model No. M-C421

Horizontal Fins
Order No. 17.079.209
Model No. M-C488



Rca: 4,78°C/W (typ.), At natural convection
2,44°C/W (typ.), At 100LFM
2,06°C/W (typ.), At 200LFM
1,76°C/W (typ.), At 300LFM
1,58°C/W (typ.), At 400LFM

Rca: 5,61°C/W (typ.), At natural convection
4,01°C/W (typ.), At 100LFM
3,39°C/W (typ.), At 200LFM
2,86°C/W (typ.), At 300LFM
2,49°C/W (typ.), At 400LFM