

Ultra-wide input voltage 6 Watt Dc-Dc Converter

FEATURES:

- Ultra-wide 4:1 input voltage range
- Efficiency at 84% Typical
- Input under-voltage protection, output short circuit, over-current, over-voltage protection
- MTBF: >1,000,000 hrs
- ROHS Compliant

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Voltage		Output Voltage	Output Current	Efficiency	Max. Capacitive Load (uF)
	(Vdc)	(Vdc)MAX	(V)	mA	%(TYP)	
76DW-110S12R6WC01	40-160	170	Vo=+12.0	500	84	470

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				4:1	
Surge Voltage(1sec max)				180	Vdc
Start-up Voltage				40	Vdc
Shutdown Voltage		32	35		Vdc
Start-up Time	Nominal input voltage & Nominal load		20		ms
CTRL	Module on	Ctrl pin open			
	Module off	Ctrl pin to Vin			
Input Filter		Pi filter			

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	(F.L To 100% Load)		±1	±3	%
Line Regulation	Input voltage variation from low to high at full load		±0.5	±1.0	%
Load Regulation	Single (F.L To 100% Load)			±1.0	%
Ripple & Noise	BW=DC To 20MHz			100	mVp-p
Transient response setting time	50% load step change		350		us
Temperature Coefficient	100% Load		±0.02	±0.03	%/°C
Over-current Protection	40~160Vdc	120		210	%Io
Over-voltage Protection	40~160Vdc	110		160	%Vo
Short Circuit Protection	40~160Vdc	Continuous, Recovers automatically after fault condition is removed			

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Isolation Voltage	Input / Output	2500Vdc/ 0.5mA/60Sec			
Switching Frequency			300		KHz
Isolation Capacitance	Input-output, 100KHz/0.1V		1000		pF
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Nickel Coated Copper With Non-Conductive Base				
Weight			15.0		g
Dimensions		25.4x25.4x10.6			mm

DESCRIPTION:

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Electromagnetic Compatibility (EMC)	
Parameters	Standards & Level
EMI	EN55032, EN55011, FCC part 15(see Fig.1 for recommended circuit)
EMS	EN55024
ESD	EN61000-4-2 air $\pm 8kV$, Contact $\pm 6kV$
Radiated immunity	EN61000-4-3 10V/m
Fast transient	EN61000-4-4 $\pm 2kV$
Surge	EN61000-4-5 $\pm 2kV$

EMC compliance circuit

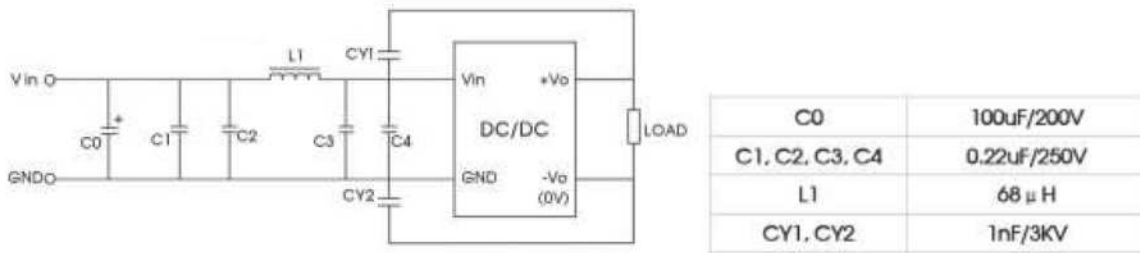
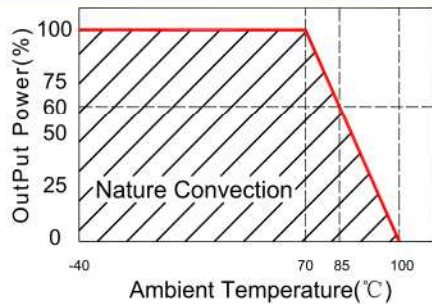
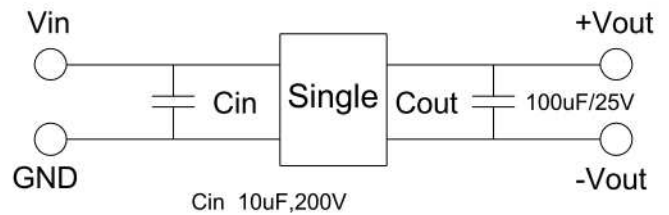


Fig. 1

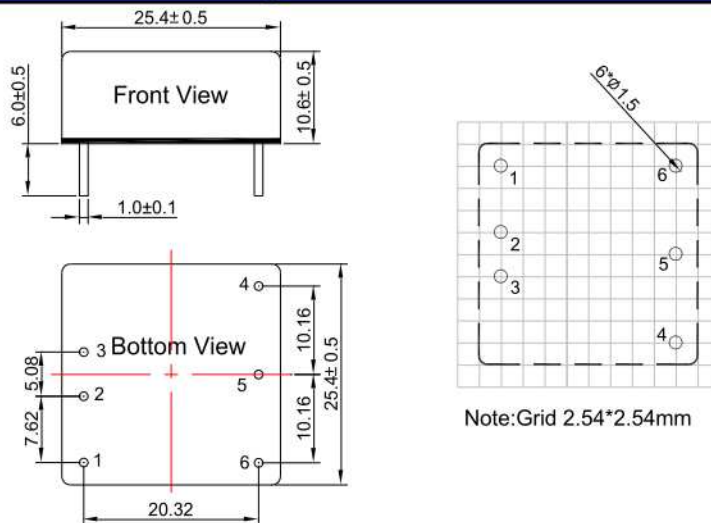
Temperature Derating Graph



Recommended Test Circuit



Markings and dimensions



UNIT: mm Unless otherwise specified, all tolerances are ± 0.25

PIN Connection

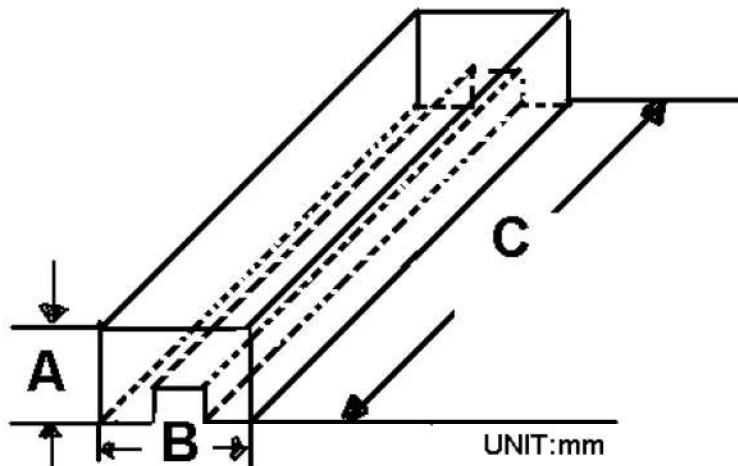
PIN	1	2	3	4	5	6
SINGLE	CTRL	-Vin	+Vin	+Vout	No Pin	-Vout

Packing Information:

Weight-----15.0 grams/pcs

TUBE----- 20pcs

Weight: 338g per tube



Size(mm)		
A	B	C
18.9	28.3	522

Outer carton unit: 600pcs/30Tube/box

Weight: 11.0kg per carton

