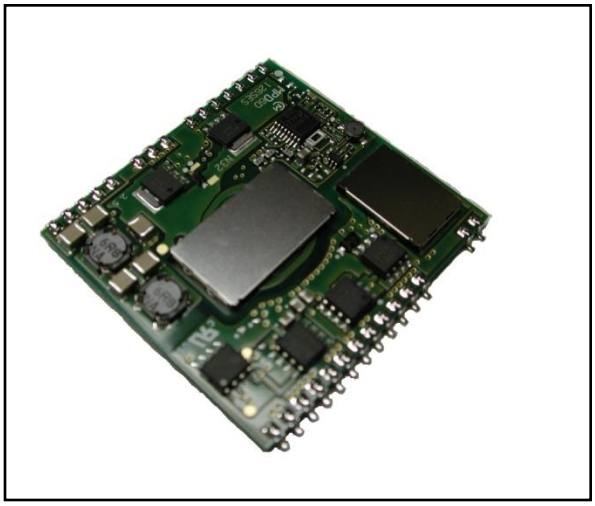
Isolated DC-DC Converter for Telecommunication Equipment[TN30(A)series]

■ FEATURES

- Ultra Low Profile(45.0 by 45.0 by 4.2mm Typ.)
- SMD
- Wide Input Voltage Range(36 to 75V)
- Up to 10 devices in Parallel Operation
- Wide Operating Ambient Temperature with **No** powerderating (-40 to +85C)
- Input-Output Isolation Voltage(1.5kVdc,1min.)



■ FUNCTIONS

- Over current Limit Inception
- Low voltage Protection
- Over voltage Protection
- Remote On/Off control
- EMI in accordance with CISPR22,Class A

■ GENERAL SPECIFICATIONS

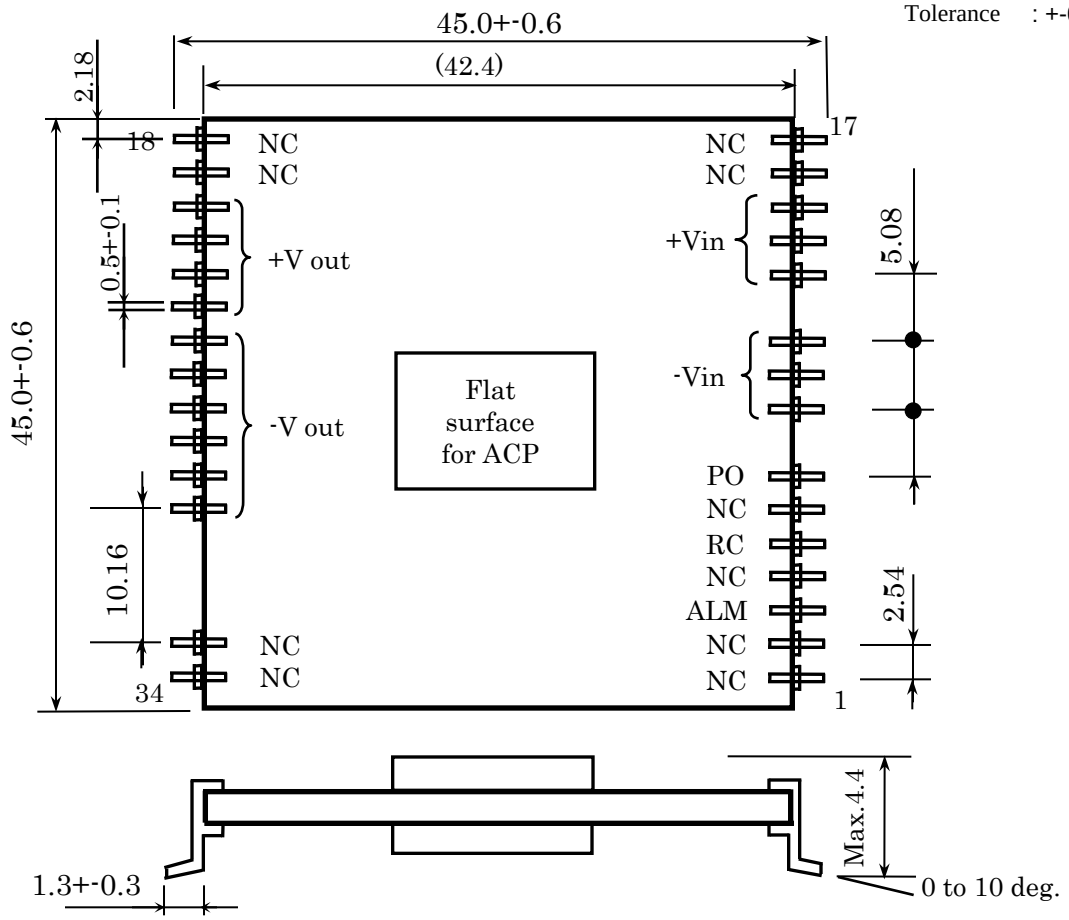
Item \ Model		MPD6D***S Series					
		122	123	124	126	127	128
Input	Nominal Input Voltage	48V					
	Input Voltage Range	36 to 75V(Natural Air Convection 0.2m/s or 40LFM)					
	Turn-on Input Voltage	32 to 36V					
	Turn-on/off Hysteresis (Min.)	2V					
Output	Output Voltage	1.2V	1.5V	1.8V	2.5V	3.3V	5.0V
	Output Voltage Tolerance	+5%,-3%					
	Nominal Output Current	12A	11A		10A	9A	6A
	Overcurrent Limit Inception (Min.)	12.4A	11.3A		10.3A	9.3A	6.2A
	Lowvoltage Protection(Max.)	90% of Nominal Output Voltage					
	Efficiency(typ) Note 1	84%	86%	88%	90%	91%	92%
	Output Ripple and Noise(Max.)	50mVp-p with f_{BW}=100MHz					
	Remote ON/OFF	ON :RC pin connected to –Vin or open OFF:RC pin connected to +Vin					
Isolation	Input - Output(Min.)	1500Vdc, 1 minute					
Environment	Operation Ambient Temperature Operating Humidity	-40 to 85 C. 20 to 85% No due					
	Storage Ambient Temperature Storage Humidity	-45 to 90 C. 10 to 95% No due					

Note 1:Vin=48V,Iout=Nominal output current

■ DIMENSIONS

<TOP VIEW>

Unit : mm
Tolerance : +-0.5



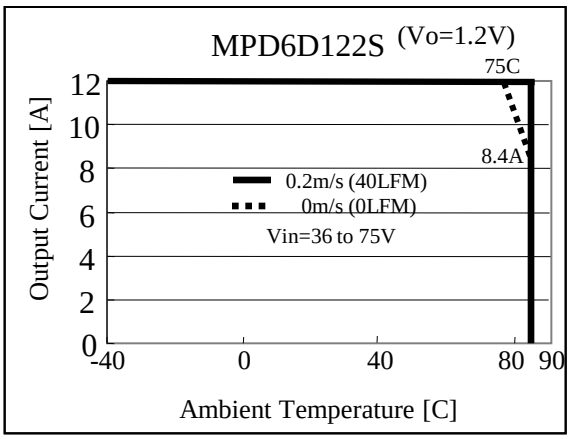
Weight :Max.18g

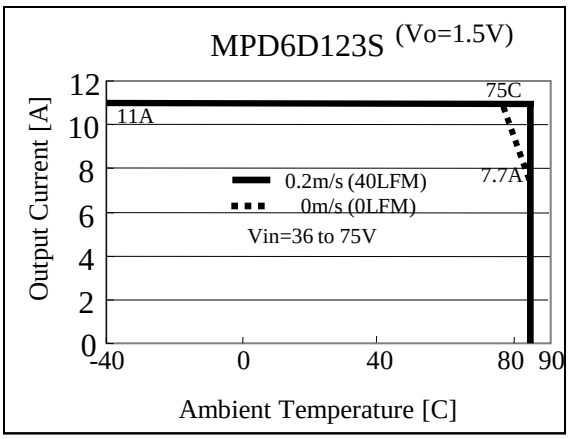
Pin assignment

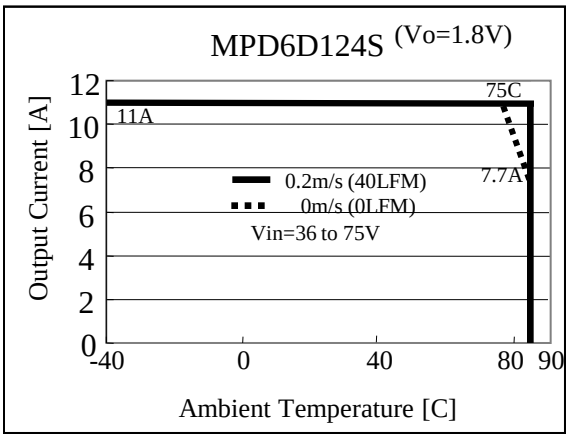
Pin No.	Designation	Function
1,2,4,6,16,17,18, 19,33,34	NC	Not Connected Note1
3	ALM	Alarm Note2
5	RC	Remote On/Off Control
7	PO	Parallel Operation Note3
9,10,11	- Vin	- Input
13,14,15	+ Vin	+ Input
20,21,22,23	+V out	+Output
24,25,26,27,28,29	-V out	-Output

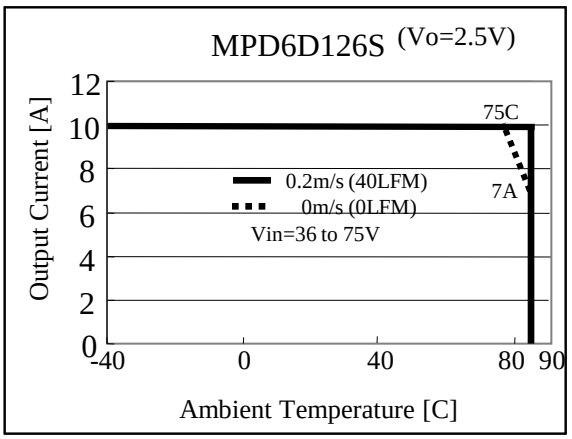
Note 1:Pins at four corners of the substrate are recommended to bond a motherboard with thermal setting resin when DC-DC converters are mounted on the motherboard backside. Otherwise DC-DC converters may fall from a motherboard during the secondary reflow process.
Note 2: Any DC-DC converter halted by abnormality forces all DC-DC converters, which are connected ALM pins to the others for parallel and/or multiple operation,to stop their operation.
Note 3: DC-DC converters connected PO pins to the others can synchronize start timing for parallel and/or multiple operation.

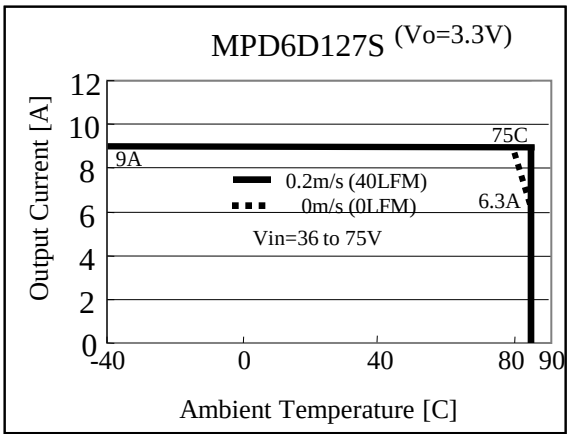
■ Powerderating

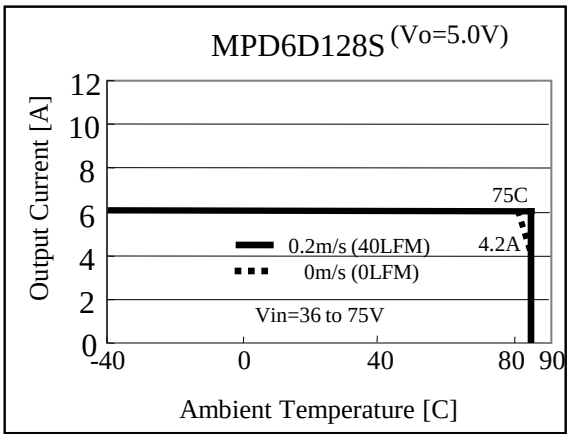












■ Safety

UL60950 recognized, CE marking(LVD directive)

Product specification in this catalog are as of May 2011,and are subject to change or stop the supply without notice.
Please confirm the specification before ordering any product.
If there are any questions, please contact our sales representatives or engineers.