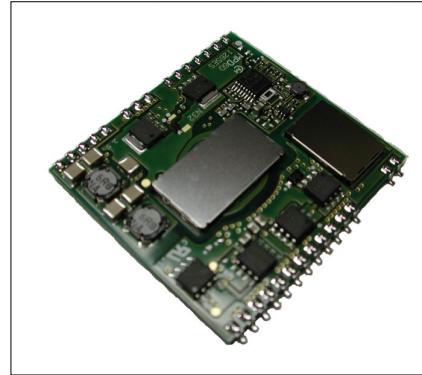


MPD6D12_S Series Isolated 30W DC-DC Converter for Telecomm Equipment

■ Features

- No Derating (@ 40LFM Natural Convection Air Flow)
- Smallest and Lowest Profile in the Industry
- Surface Mount
- Wide Input Voltage Range (36 to 75V)
- Current Sharing (Up to 10 devices in Parallel Operation)
- Power Sequencing
- On/Off Control Function
- Wide Operating Temperature Range (-40 to +85 degreeC)
- Input-Output Isolation (1.5kVdc for 1 minute)
- Over Current Limit Inception
- Low Voltage Protection
- Over Voltage Protection
- Alarm Output
- EMI Compliance with CISPR22, Class A
- Multiple Sources Available



■ General Specifications

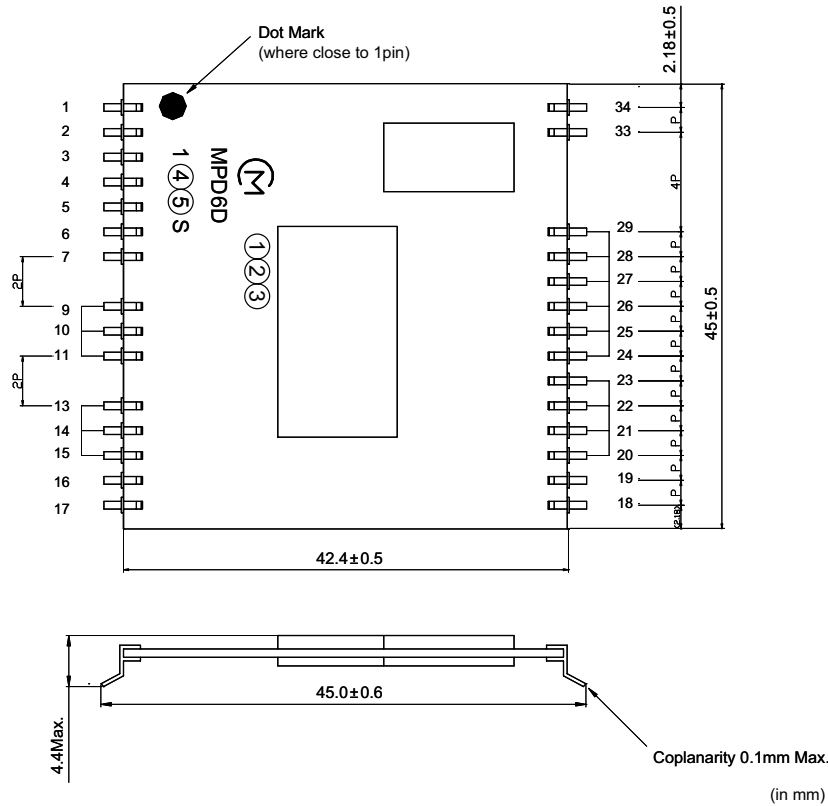
Item		Model	MPD6D12_S Series					
			122	123	124	126	127	128
Input	Nominal Input Voltage	48V						
	Input Voltage Range	36 to 75V (Natural Air Convection 0.2m/s or 40LFM)						
	Turn-On Input Voltage	32 to 36V						
	Turn-On/Off Hysteresis (Min.)	2V						
Output	Output Voltage	1.2V	1.5V	1.8V	2.5V	3.3V	5.0V	
	Output Voltage Tolerance	+5%, -3%						
	Nominal Output Current	12A	11A		10A	9A	6A	
	Over Current Limit Inception (Min.)	12.4A	11.3A		10.3A	9.3A	6.2A	
	Low Voltage Protection (Max.)	90% of Nominal Output Voltage						
	Efficiency (Typ.) <small>Note 1</small>	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.)	1,500Vdc, 1 minute						
Environment	Operation Ambient Temperature	-40 to 85°C						
	Operating Humidity	20 to 85% No Condensation						
	Storage Ambient Temperature	-45 to 90°C						
	Storage Humidity	10 to 95% No Condensation						

Note 1: Vin=48V, I_{out}=Nominal Output Current

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MPD6D12_S Series Isolated 30W DC-DC Converter for Telecomm Equipment

Appearance and Dimensions



Pin Number and Function

Pin No.	Pin Symbol	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	+Vout	+Output
24,25,26,27,28,29	-Vout	-Output

Note 1: It is recommended that pins at four corners of the substrate be bonded to the assembly board with a thermal setting resin when DC-DC Converters are mounted on the assembly board's underside. Otherwise DC-DC Converters may fall from the assembly board during the secondary reflow process.

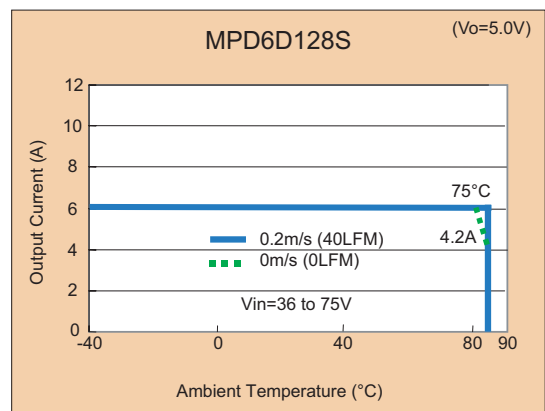
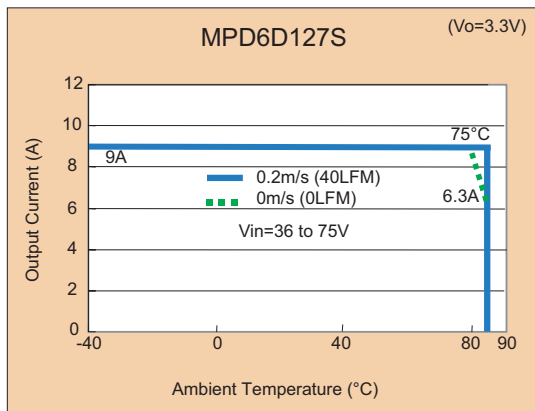
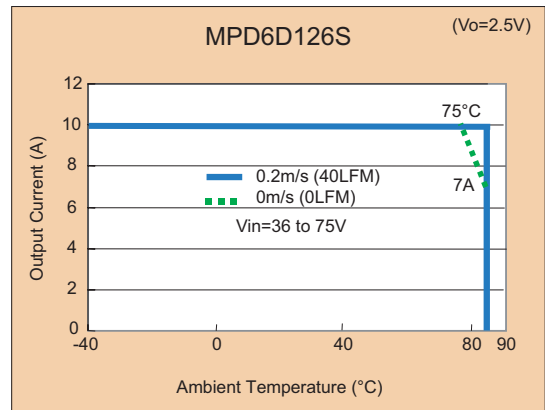
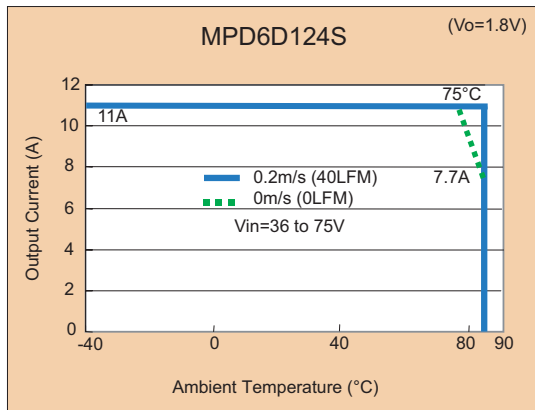
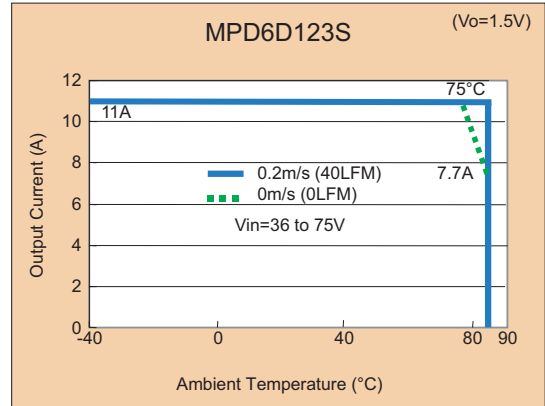
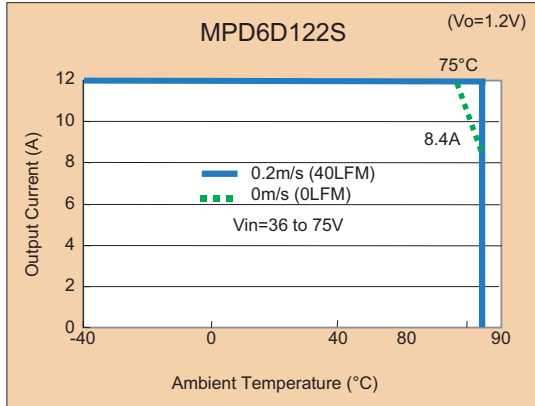
Note 2: Any DC-DC Converter halted abnormally forces all DC-DC Converters, connected via ALM pins for parallel and/or multiple operation, to stop their operation.

Note 3: The start-up of DC-DC Converters connected via PO pins may be synchronized for parallel and/or multiple operation (Power Sequencing).

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Typical Power Derating



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MPD6D12_S Series Isolated 30W DC-DC Converter for Telecomm Equipment

■ Safety

UL60950 recognized, CE marking (LVD and EMC directive)



Compliance of EMC directive is confirmed by TUV Rheinland Japan

Product specification in this catalog are as of July 2004, and are subject to change or discontinuance without notice.
Please confirm the specification before ordering any product.
If there are any questions, please contact our sales representatives or engineers.

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