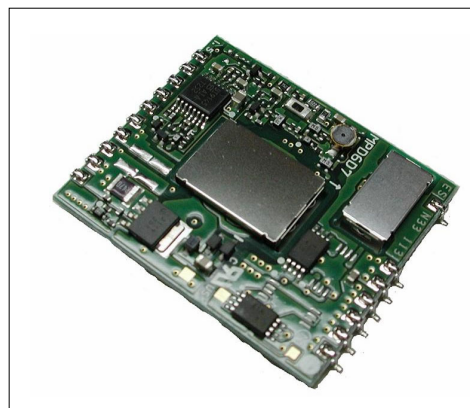


# MPD6D11\_S Series Isolated 15W DC-DC Converter for Telecom Equipment

## ■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	MPD6D11_S Series						
			112	113	114	116	117	118	119
Input	Nominal Input Voltage	48V							
	Input Voltage Range	36 to 60V with Natural Air Convection 40LFM (0.2m/S)							
		36 to 75V with Forced Air Convection 200LFM (1.0m/S)							
	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	5.2V	
	Output Voltage Tolerance	+5%, -3%							
	Nominal Output Current	5.2A			4.5A		3A		
	Over Current Limit Inception (Min.)	5.35A			4.63A		3.09A		
	Low Voltage Protection (Max.)	90% of Nominal Output Voltage							
	Efficiency (Typ.)    Note 1	82%	84%	87%	88%	90%			
	Output Ripple and Noise (Max.)	50mVp-p with fbw=100MHz							
	Remote On/Off	ON: RC Pin Connected to -Vin or Open OFF: RC Pin Connected to +Vin							
Isolation	Input-Output (Min.)	1,500Vdc,1minute							
Environment	Operation Ambient Temperature Operating Humidity	-40 to 85°C 20 to 85% No Condensation							
		-45 to 90°C 10 to 95% No Condensation							
	Storage Ambient Temperature Storage Humidity								

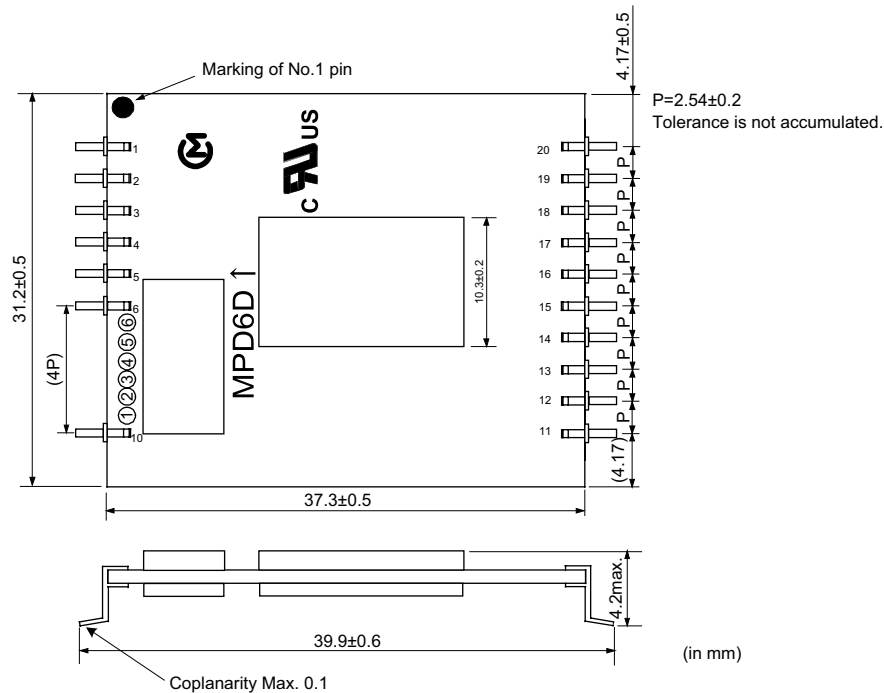
Note 1: Vin=48V, Iout=Nominal Output Current

▲Note • Please read rating and ▲CAUTION (for storage, operating, rating, soldering, mounting and handling) in this catalog to prevent smoking and/or burning, etc.

• This catalog has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

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## ■ Appearance and Dimensions



## ■ Pin Number and Function

Pin No.	Pin Symbol	Function
1,10,11,15,20	NC	Not Connected Note 1
2,3,4	+Vout	+Output
5,6	-Vout	-Output
12	ALM	Alarm Note 2
13	RC	Remote Control On/Off
14	PO	Parallel Operation Note 3
16,17	+Vin	+Input
18,19	-Vin	-Input

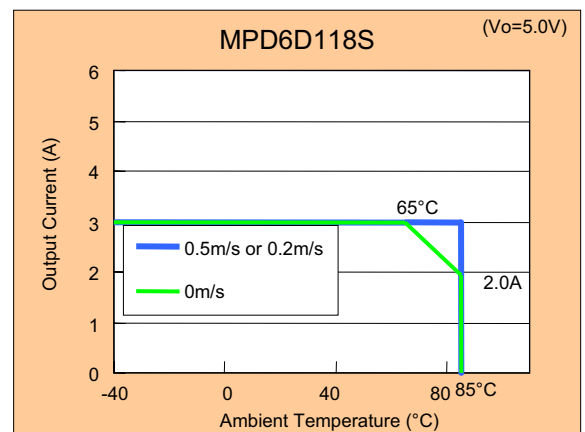
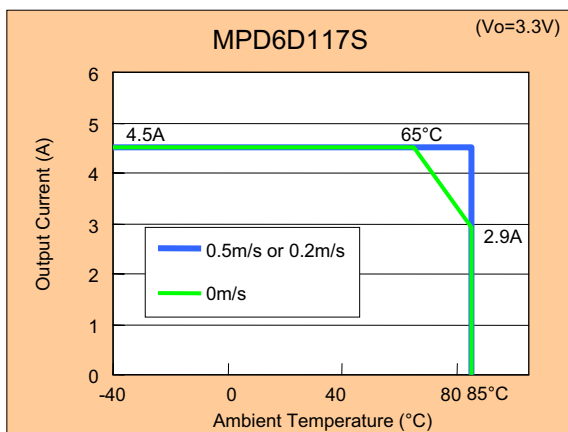
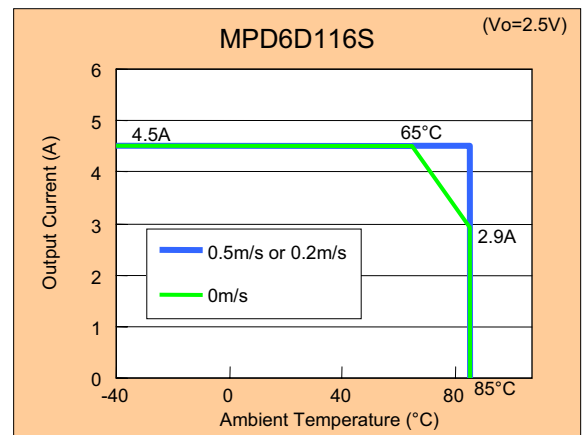
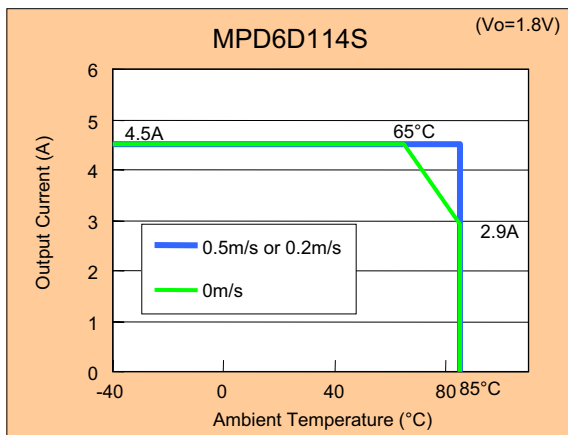
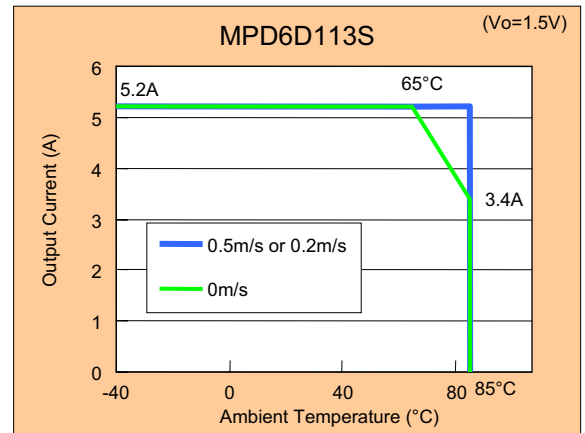
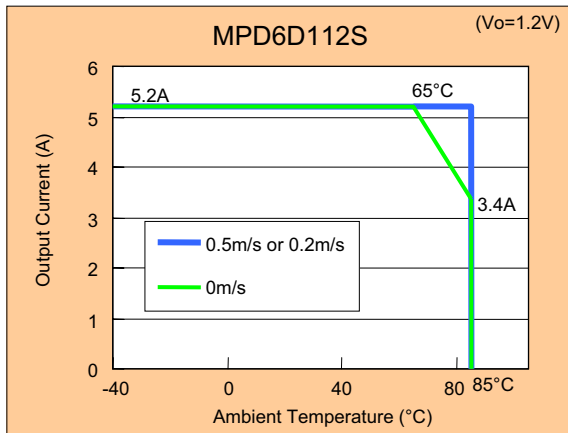
Note 1: It is recommended that pins at four corners of the substrate be bonded to the assembly board with a thermal setting resin when DC-DC Converters are mounted on the assembly board's underside. Otherwise DC-DC Converters may fall from the assembly board during the secondary reflow process.

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).

# MPD6D11\_S Series Isolated 15W DC-DC Converter for Telecom Equipment

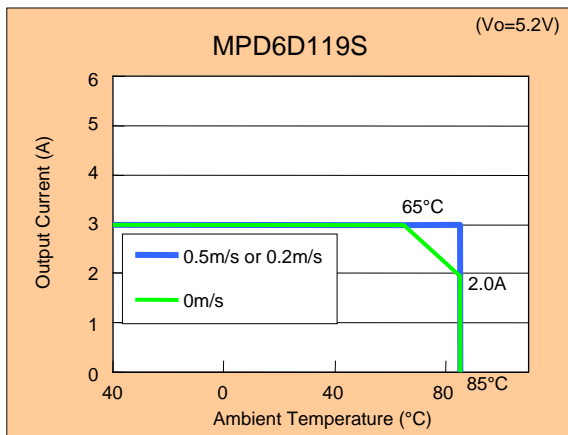
## ■ Typical Power Derating



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## ■ Safety

UL60950 recognized, CE marking (LVD & EMC directive)



Compliance of EMC directive is confirmed by TUV Rheinland Japan

Products 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.