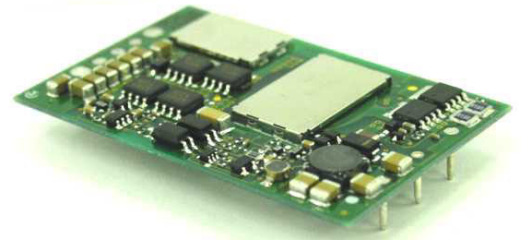


# MPDKN00\_S Series Isolated 50W Quarter Brick DC-DC Converter for Telecom Equipment

## ■ Features

- Lowest Profile in the Industry (5.5mm Max.)
- High Efficiency (Up to 89%)
- Wide Input Voltage Range (36 to 75V)
- Trim Function Vout Range (-20 to +10% of Nominal)
- Input-Output Isolation (1.5kVdc)
- Open Frame (Forced Air Convection Cooling)
- Wide Operating Ambient Temp. (-40 to +85 degreeC)
- Over Current Protection
- Over Voltage Protection
- Over Temperature Protection
- On/Off Control (Negative Logic)
- Output Voltage Remote Sensing
- UL60950 Recognized
- Protection Function Latch Method



## ■ Electrical Specifications

Item	Model	MPDKN__S Series			
		004	006	007	008
Input Voltage Range		48V (36 to 75V)			
Nominal Output Voltage		1.8V	2.5V	3.3V	5V
Nominal Output Current		15A			10A
Nominal Output Wattage		27W	38W	50W	50W
Output Voltage Accuracy		±3% (Input Voltage Range 36 to 75V, Operation Temperature Range -40 to 85°C)			
Efficiency (Typ.) <small>Note 1</small>		85%	87%	88%	89%
Output Ripple Noise Voltage (Max.)		100mVp-p (f <sub>BW</sub> = 20MHz)			
Output Voltage Variable Range		-20 to +10%			
Protection		Over Voltage, Over Current, Over Temperature Protection			
Over Current Protection Value		103 to 160%			
Over Voltage Protection Value		120 to 140%			
Over Heat Protection Value		-			
Remote On/Off		Negative Logic			
Input-Output Isolation Voltage		1,500Vdc (1 minute)			
Safety Standard		UL60950 (US and Canada)			
Operation Temperature and Humidity Range		-40 to 85°C, 20 to 85% (No Condensation, Power Derating)			
Storage Temperature and Humidity Range		-45 to 90°C, 10 to 95% (No Condensation)			

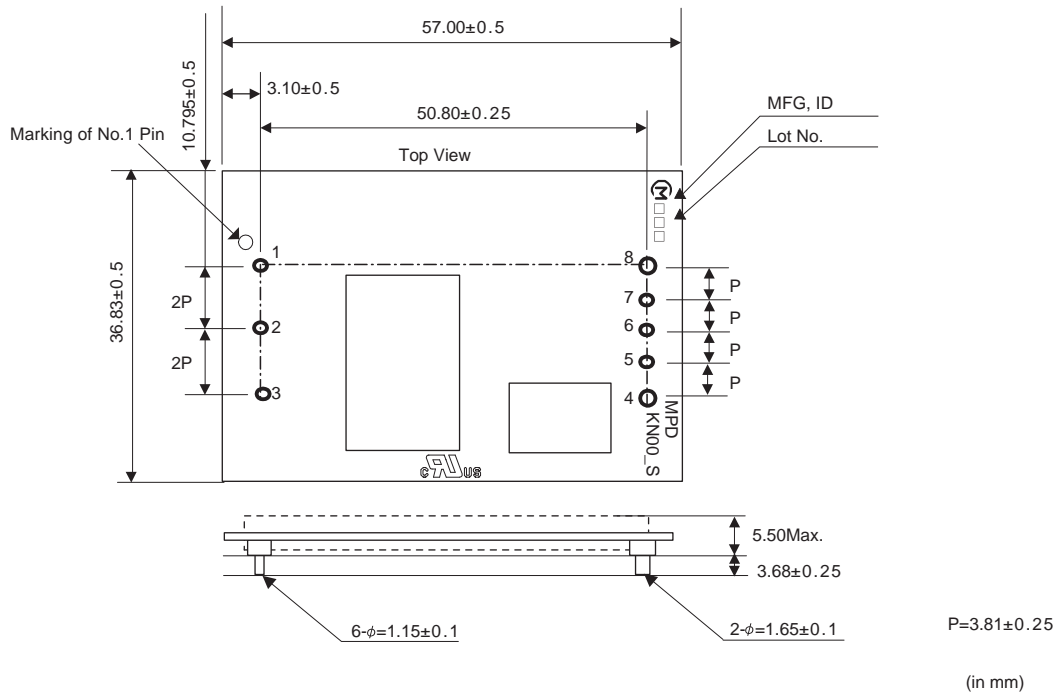
Note 1: Nominal Input Voltage, Nominal Output Current

⚠ 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.

# MPDKN00\_S Series Isolated 50W Quarter Brick DC-DC Converter for Telecom Equipment

## ■ Dimensions



## Pin Number and Function

Pin No.	Pin Symbol	Function
1	Vin(+)	(+)Positive Input Voltage
2	On/Off	Remote On/Off
3	Vin(-)	(-)Negative Input Voltage
4	Vout(-)	(-)Negative Output Voltage
5	SENSE(-)	(-)Negative Remote Sense
6	TRIM	Output Voltage Trim
7	SENSE(+)	(+)Positive Remote Sense
8	Vout(+)	(+)Positive Output Voltage

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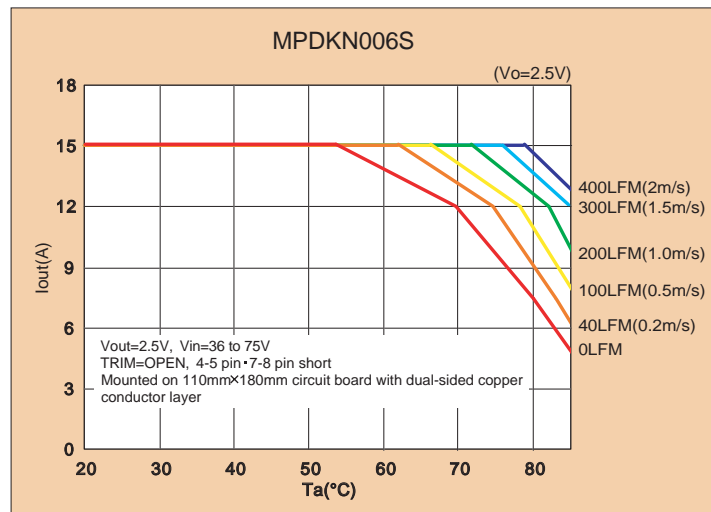
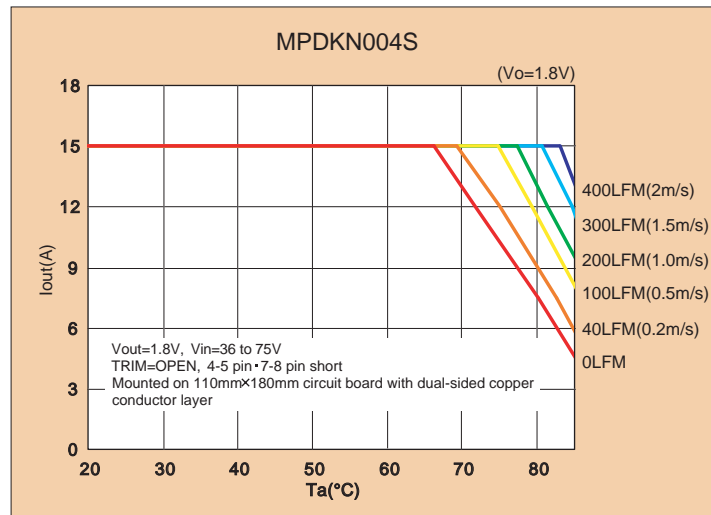
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## ■ Typical Power DeRating

When using this product at the ambient air temperature of 30 degreeC or more, it should be used by the following temperature derating.

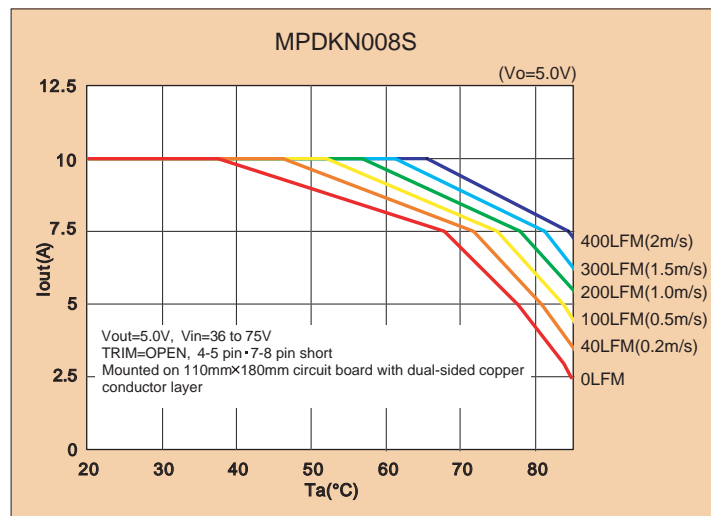
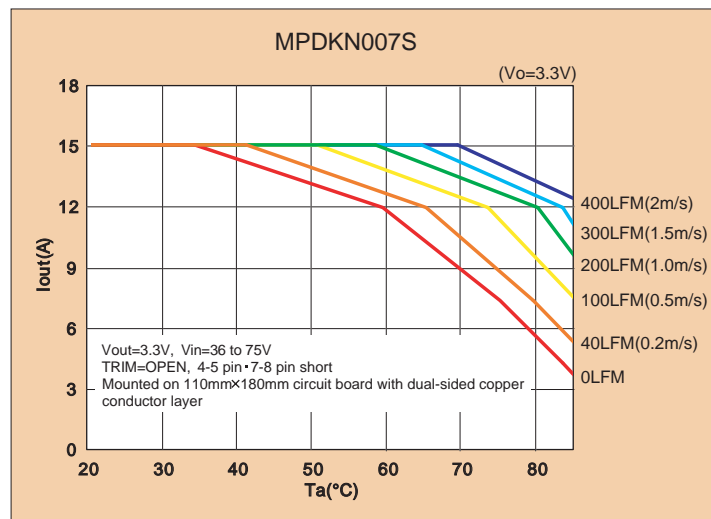
Temperature Derating Characteristic



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