DC-DC Converter Short Form

MPD7D12*S (Isolated DC-DC Converter)

Features

- · 100W Power, Ultra Low Profile,
- Small size $45.0 \times 45.0 \times 8.0$ mm typ. SMD
- Wide Input Voltage Range (36 to 75V)
- · Parallel Operation is available
- Wide operational temperature (-40°C to +85°C) (See the Thermal Derating)
- Input-Output Isolation Voltage (1.5kVdc)
- Over Current Limit Inception
- Low Voltage Protection
- · Over Voltage Protection
- Remote ON/OFF
- · Synchronizes start and halt
- Alarm Output
- EMI in accordance with VCCI, Class A (Needs External Filter Circuit)
- Recognized UL60950, CE Marking



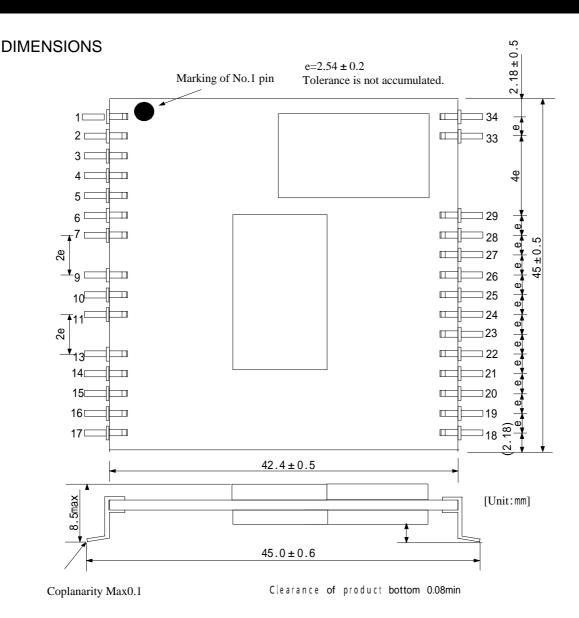
GENERAL SPECIFICATIONS

		MPD7D***S
		128
Input	Nominal Input Voltage	48V
	Input Voltage Range	36~75V
	Turn-on Input Voltage	32~36V
	Turn-on/off Hysteresis	2V min.
Output	Output Voltage	5.0V
	Output Voltage Tolerance	-3%,+5% Vin:36~75V, Output Current & Temperature:*1
	Output Current *1	20A
	Over Current Limit Inception (min.)	21A
	Low Voltage Protection (max.)	4.5V
	Efficiency(typ.) *2	92.5%
	Output Ripple Noise Voltage (max.), BW=100MHz	125mVpp
	Remote ON/OFF	ON :RC pin connected to –Vin or open OFF :RC pin connected to +Vin
Isolation	Input – Output (min.)	1500Vdc
Environment	Operating Temperature & Humidity Range	-40~85 °C, 20~85%RH (No dew)
	Storage Temperature & Humidity Range	-40~85 °C, 10~90%RH (No dew)

^{*1} Please refer the Thermal Derating.

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- 2. This datasheet 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.

^{*2} Vin=48V, Io=max., 1.0m/s air flow, Ta=25 °C



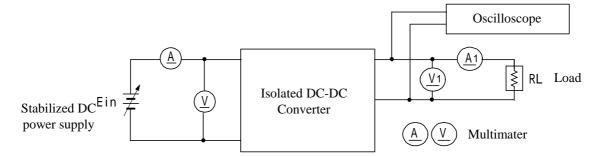
Pin No.	Symbol	Function
1,2,16,17,18,19,33,34	NC	
3	ALM	Alarm output to stop all in abnormality *1
4,6	NC	
5	RC	Remote ON/OFF
7	PO	Parallel operation. *2
9,10,11	-Vin	(-)Input
13,14,15	+Vin	(+)Input
20,21,22,23	+Vout	(+)Output
24,25,26,27,28,29	-Vout	(-)Output

- *1 When arbitrary one converter stops abnormally and terminal ALMs of each other are connected mutually, all converters stop operating.
 *2 When plural converters are operated in parallel, the start timing can be unified by mutually
- connecting terminal POs of each other.

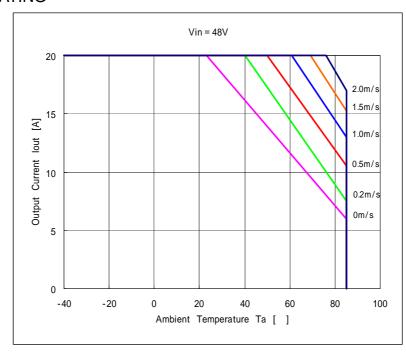
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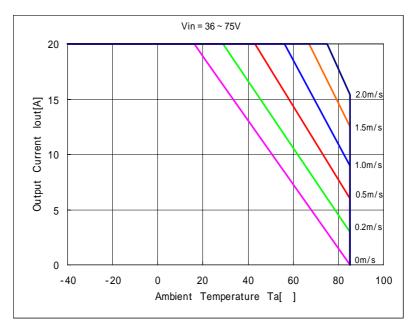
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TEST CIRCUIT



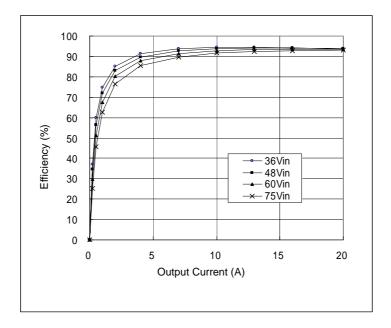
THERMAL DERATING





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EFFICIENCY



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