

## PSD-05 Series - 5W Single Output DC-DC Converter

[Home](#) > [Products](#) > [DC-DC Converters](#) > 5W Single Output DC-DC Converter

### Features

- 2:1 wide input range
- 2000VDC I/O isolation
- Short circuit, Overload, Over voltage, Over temperature protection
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Fix switching frequency at 67KHz
- Cooling by free air convection

### Applications

- General electrical engineering
- Automotive
- Battery back-up

### Standards



### Case Details

75 x 40 x 20mm

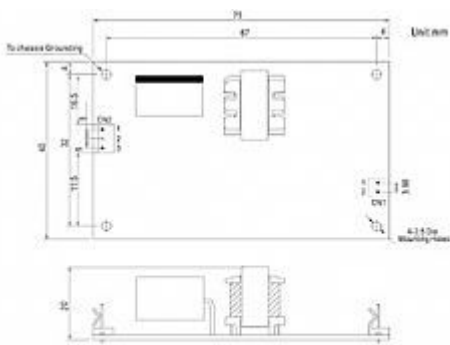
### Specification

<b>Voltage Range</b>	36 ~ 72VDC
<b>DC Current (typ.)</b>	0.15A/48V
<b>Setup, Rise, Hold Up Time</b>	1.2s, 20ms at full load
<b>Over Load Protection</b>	Above 105% rated output power Fold back current limiting, recovers automatically after fault condition is removed
<b>Over Voltage Protection</b>	Hiccup mode, recovers automatically after fault condition is removed
<b>Over Temperature Protection</b>	U1 Tj140 typically (U1)Detect on main control IC Hiccup mode, recovers automatically after temperature goes down
<b>Working Temperature</b>	-10°C to +60°C (Refer to output load derating curve)
<b>Working Humidity</b>	20 ~ 90% RH non-condensing
<b>Storage Temp., Humidity</b>	-20°C to +85°C, 10 ~ 95% RH
<b>Temperature Coefficient</b>	±0.05%/°C (0 ~ 50°C)
<b>Vibration</b>	10 ~ 500Hz, 2G 10min./1 cycle, Period for 60min. each along X, Y, Z axes
<b>Withstand Voltage</b>	I/P-O/P: 2KVAC
<b>Isolation Resistance</b>	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC
<b>EMC</b>	Compliance to EN55022 (CISPR22) Class B EN61000-4-2,3,4,6,8, ENV50204, EN55024, EN61000-6-1 Light industry level, criteria A
<b>Dimensions</b>	75 x 40 x 20mm

**Items**

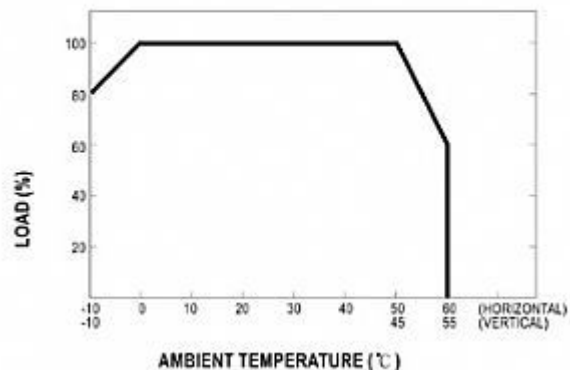
**PSD-05 Series Output Data**

Part Code	DC voltage	Rated current	Current range	Rated power	R & N (max)
PSD-05-05	5V	1A	0 ~ 1A	5W	50mV
PSD-05-12	12V	0.45A	0 ~ 0.5A	5.4W	100mV
PSD-05-24	24V	0.22A	0 ~ 0.25A	5.28W	150mV
Part Code	Tol.	Line reg.	Load reg.	Eff. (typ.)	OVP
PSD-05-05	±2.0%	±1.0%	±1.0%	75%	5.75~ 6.75V
PSD-05-12	±2.0%	±1.0%	±1.0%	78%	13.8~16.2V
PSD-05-24	±2.0%	±0.5%	±0.5%	78%	27.6~ 32.4V

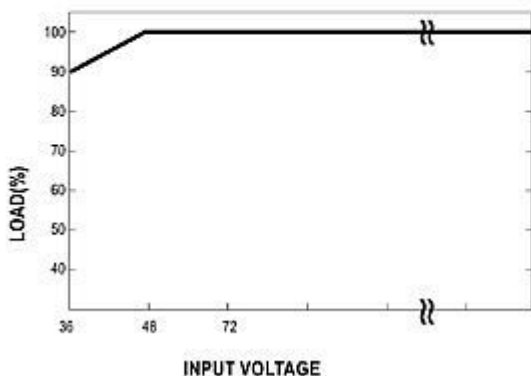


DC Input Connector (CAN), MOLEX2215-03 or equivalent				DC Output Connector (CMT), MOLEX2213-03 or equivalent			
Pin No.	Assignment	Mating Housing	Terminal	Pin No.	Assignment	Mating Housing	Terminal
1	FG	MOLEX 5106	MOLEX 2478 or equivalent	1	+/V	MOLEX 5180	MOLEX 5194 or equivalent
2	-/V	or equivalent		2	-/V	or equivalent	

**Output Derating**



**Static Characteristics**



**Related Documents**

- [PSD-05 Series Mechanical Diagram \(709KB\)](#)
- [PSD-05 Series Block Diagram \(290KB\)](#)