

# DH25

MAX. Power 25W Isolated Small DC-DC Converter

## DH25 Series Encapsulated PCB Type Small DC-DC Converter



### Features

- Encapsulated Compact Size
- High Efficiency
- Isolated Input - Output
- 300kHz fixed frequency and Current mode Control
- Low output Ripple & Noise
- Built-in over current protection circuit
- Wide 2 :1 input range
- Adjustable output voltage
- Safety : Meets UL/CE Standard (Approvals pending)
- RoHS compatible design
- 3-years warranty

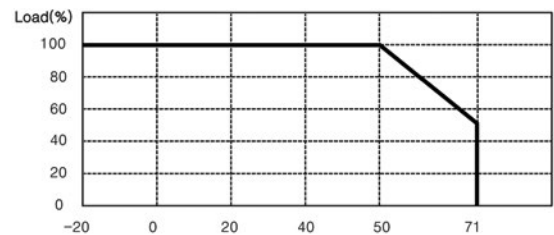
### Environment

- Operating Temperature : -20°C ~ 71°C
- Operating Humidity : 20% ~ 90% RH (Non condensing)
- Storage Temperature : -40°C ~ 105°C
- Cooling : Free-Air Convection
- MTBF :  $5.3 \times 10^5$  hrs

### Applications

- Data and telecommunication
- Datacommunication electronic equipments
- FA control

### Derating Curve



\* Operating Temperature Range : From -20°C to 71°C

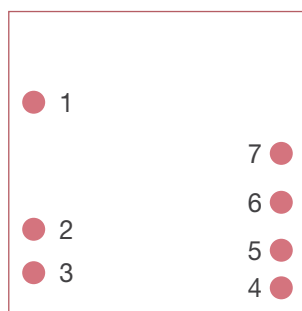
### General Specifications

Input	Input Voltage Range	24V(18~36), 48V(36~72)
	Efficiency	82% ~ 88%
Output	Output Voltage	3.3V, 5V, 9V, 12V, 15V, 24V
	Line Regulation	± 0.5%
	Load Regulation	± 1.0%
	Output Voltage Accuracy	± 2.0%
	Output Voltage adj. Range	± 10%
Protection Circuit	Over Current Protection	Works at over 105% of rating and recovers automatically
	Over Voltage Protection	Works at over 115% ~ 140% of rating
Electrically Isolated	High Pot	Input / Output, Input / Case, Output / Case : AC500V 1minute
	Isolation	Input / Output, Input / Case, Output / Case : DC500V 100MΩ

### DHS25 Series Ordering Information (Single Output)

MODEL	DHS25-24-3R3	DHS25-24-05	DHS25-24-09	DHS25-24-12	DHS25-24-15	DHS25-24-24	DHS25-48-3R3	DHS25-48-05	DHS25-48-09	DHS25-48-12	DHS25-48-15	DHS25-48-24	
Input Voltage (V)	24 (18 ~ 36)						48 (36 ~ 72)						
Output	Vout (V)	3.3	5	9	12	15	24	3.3	5	9	12	15	24
	Iout (A)	4	4.2	2.8	2.1	1.7	1.05	4	4.2	2.8	2.1	1.7	1.05
Maximum Power (W)	13.2	21	25.2	25.2	25.5	25.2	13.2	21	25.2	25.2	25.5	25.2	
Ripple & Noise (mVp-p)	70	70	100	120	150	200	70	70	100	120	150	200	
Efficiency Typ. (%)	83	85	87	87	87	87	82	84	85	86	86	88	

### Pin assignments



Pin No.	Single
1	+Vin
2	-Vin
3	CNT
4	TRM
5	-Vout
6	No Pin
7	+Vout

#### Function Pin

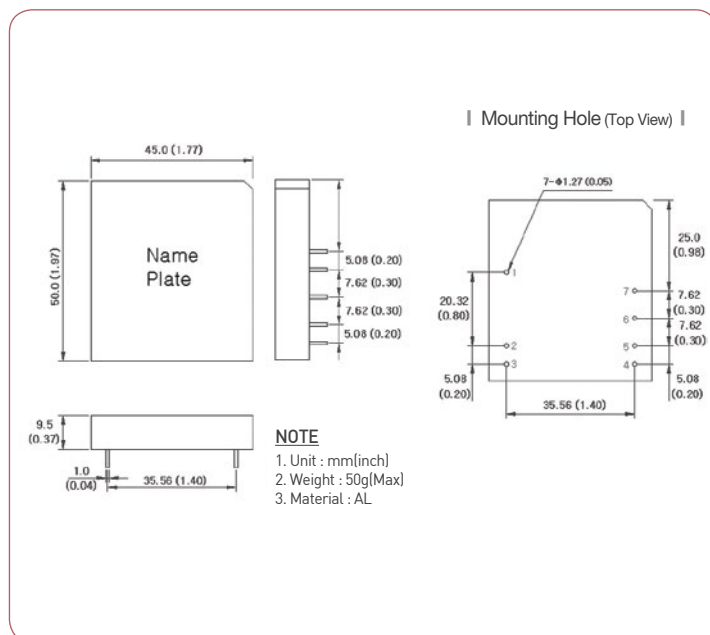
**Pin No.3 CNT** : Remote on/off Control

on : 0~1.2VDC or short -Vin

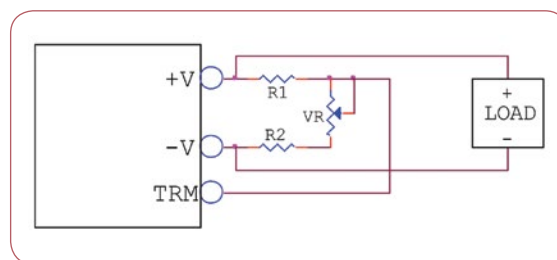
off : 2.4~5.5VDC or open

**Pin No.4 TRM** : Output Voltage Trimmable ( $\pm 10\%$ )

### Outline Dimensions : (Unit : mm (inch))



### Trim method



### External parts

	Output	R1	R2	VR
Single	3.3V	150 $\Omega$	240 $\Omega$	1k $\Omega$
	5V	1k $\Omega$	680 $\Omega$	1k $\Omega$
	9V	3k $\Omega$	680 $\Omega$	1k $\Omega$
	12V	3.9k $\Omega$	680 $\Omega$	1k $\Omega$
	15V	5.6k $\Omega$	750 $\Omega$	1k $\Omega$
	24V	12k $\Omega$	1k $\Omega$	1k $\Omega$