

T: with Mounting hole (φ3.4 thru)

Measures: 2.30 x 1.47 x 0.50"

CO\$EL **DC-DC Converters Power Module type** DHS50A

Ordering information DH S **50**



MODEL	DHS50A05	DHS50A12	DHS50A15	DHS50A24
MAX OUTPUT WATTAGE[W]	50.0	50.4	51.0	50.4
DC OUTPUT	5V 10A	12V 4.2A	15V 3.4A	24V 2.1A

SPECIFICATIONS

	MODEL		DHS50A05	DHS50A12	DHS50A15	DHS50A24	
INPUT	VOLTAGE[V]		DC60 - 160				
	CURRENT[A] *1		0.55A	0.55A	0.55A	0.55A	
	EFFICIENCY[%] *1		84.0typ	86.0typ	86.0typ	86.0typ	
	VOLTAGE[V]		5	12	15	24	
ОИТРИТ	CURRENT[A]		10	4.2	3.4	2.1	
	LINE REGULATION[mV]		10max	24max	30max	48max	
	LOAD REGULATION[mV]		10max	24max	30max	48max	
	RIPPLE[mVp-p]	0 to +100℃*2	80max	120max	120max	120max	
		-40 to 0℃ *2	120max	150max	150max	150max	
		0 to 15% Load*2	160max	240max	240max	240max	
	RIPPLE NOISE[mVp-p]	0 to +100℃*2	120max	150max	150max	150max	
		-40 to 0℃ *2	200max	200max	200max	250max	
		0 to 15% Load*2	240max	300max	300max	300max	
	TEMPERATURE REGULATION[mV]	0 to +65°C	50max	120max	150max	240max	
		-40 to +100°C	100max	240max	300max	480max	
	DRIFT[mV] *3		20max	40max	60max	90max	
	START-UP TIME[ms]		200max (DCIN 110V, Io=100%)				
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4		Fixed (TRM pin open), adjustable by external VR or external voltage				
			4.50 - 6.00	10.80 - 13.20	13.50 - 16.50	21.60 - 26.40	
	OUTPUT VOLTAGE SETTING[V]		4.97 - 5.13	11.91 - 12.29	14.76 - 15.24	23.62 - 24.38	
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION[V]		6.30 - 7.60	13.90 - 17.55	17.25 - 21.75	27.60 - 34.80	
	REMOTE SENSING		nothing				
	REMOTE ON/OFF		Provided (Negative Logic L : ON, H :OFF)				
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20±15 $^{\circ}$ C)				
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (20±15 $^{\circ}$ C)				
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (20±15 $^{\circ}$ C)				
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-40 to +100℃ (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000 feet) max				
	STORAGE TEMP., HUMID. AND ALTITUDE		-40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000 feet) max				
	VIBRATION		10 - 55Hz, 49.0m/s² (5G), 3minutes period, 60minutes each along X, Y and Z axis Complies with IEC61373 Category 1 Class B				
	IMPACT		196.1m/s² (20G), 11ms, once each along X, Y and Z axis Complies with IEC61373 Category 1 Class B				
SAFETY	AGENCY APPROVAL	_S	UL60950-1, C-UL (CSA609	50-1, C-UL (CSA60950-1), EN60950-1			
OTHERS	CASE SIZE/WEIGHT		58.4×12.7×37.3mm [2.3×0.5×1.47 inches] (W×H×D) / 60g max				
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)				

At rated input(DC110V) and rated load.

Ripple and ripple noise is measured by using measuring board. Refer to the manual

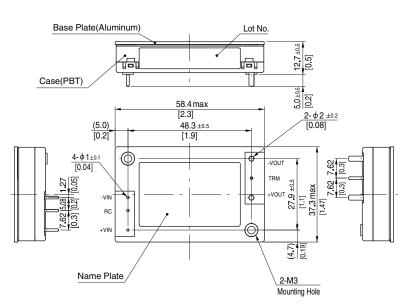
Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

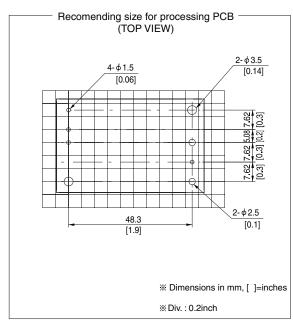
Refer to the manual for input range.



Measures: 2.30 x 1.47 x 0.50"

External view





- ※ Tolerance: ±0.3 [±0.012]
- * Weight: 60g max
- ※ Dimensions in mm, []=inches
- Mounting hole screwing torque: 0.49N · m (5.0kgf · cm) max