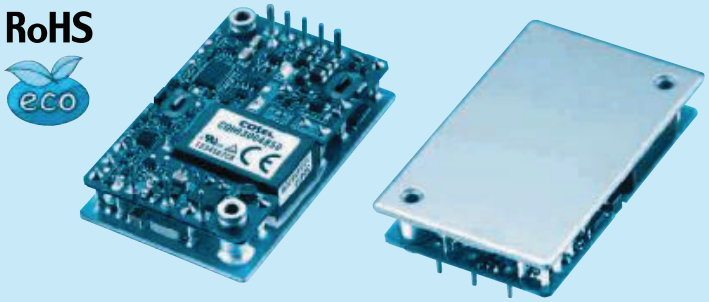
COSEL DC-DC Converters Power Module type

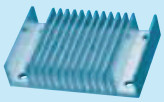
CQHS300

Ordering information

CQH	S	300	48	50	-□
①	②	③	④	⑤	⑥



*Providing heat sink as option



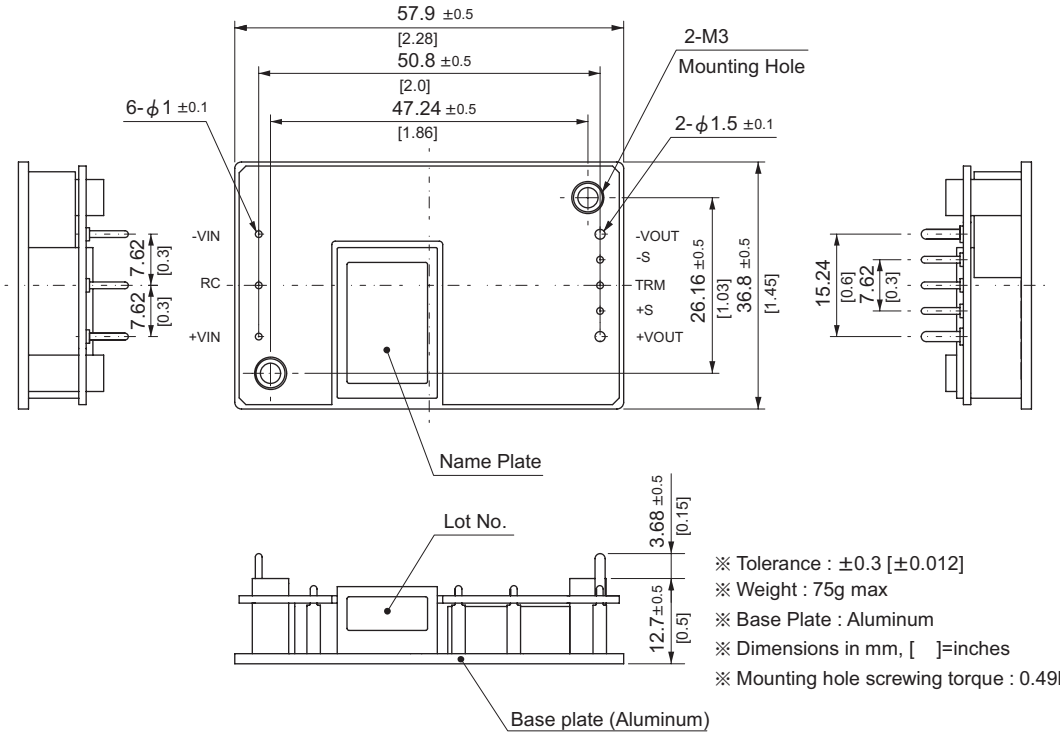
①Series name
②Single output
③Output wattage
④Input voltage
48:DC36 - 76V
⑤Output voltage
⑥Optional
R :with Remote ON/OFF
Positive logic control
T :with Mounting hole
ϕ3.4 thru

MODEL	CQHS3004832	CQHS3004850
MAX OUTPUT WATTAGE[W]	300.8	300
DC OUTPUT	32V 9.4A	50V 6A

SPECIFICATIONS

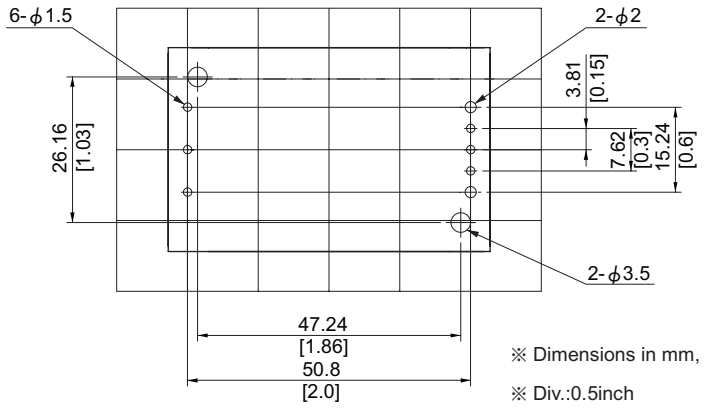
	MODEL		CQHS3004832	CQHS3004850
INPUT	VOLTAGE[V]		DC36 - 76	
	CURRENT[A]	*1	6.67typ	6.65typ
	EFFICIENCY[%]	*1	94typ	94typ
	START-UP VOLTAGE[V]		DC32 - 36	
	HYSTERESIS VOLTAGE[V]		DC2 min	
OUTPUT	VOLTAGE[V]		32	50
	CURRENT[A]		9.4	6.0
	LINE REGULATION[mV]		64max	100max
	LOAD REGULATION[mV]		64max	100max
	RIPPLE[mVp-p]	-20 to +100℃ *2	255max	400max
		-40 to -20℃ Vin=36-60V *2	320max	500max
		-40 to -20℃ Vin=60-76V *2	400max	500max
	RIPPLE NOISE[mVp-p]	-20 to +100℃ *2	320max	500max
		-40 to -20℃ *2	410max	650max
	TEMPERATURE REGULATION[mV]	0 to +65℃	320max	500max
		-40 to +100℃	640max	1000max
	DRIFT[mV]	*3	120max	185max
	START-UP TIME[ms]		200max (DCIN 48V, Io=100%)	
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	*4	Fixed (TRM pin open), adjustable by external resistor	
			27.2 - 35.2	45.0 - 55.0
	OUTPUT VOLTAGE SETTING[V]	*1	31.68 - 32.32	49.50 - 50.50
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating, low voltage protection (shut down) function is built-in.	
	OVERVOLTAGE PROTECTION[V]		36.80 - 44.80	56.50 - 67.50
	REMOTE SENSING		Provided	
	REMOTE ON/OFF		Provided (Negative Logic L : ON, H :OFF)	
ISOLATION	INPUT-OUTPUT		DC1,500V or AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)	
	INPUT-BASE PLATE		DC1,500V or AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)	
	OUTPUT-BASE PLATE		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)	
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℃, 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	
	IMPACT		196.1m/s² (20G), 11ms, once each along X, Y and Z axis	
SAFETY	AGENCY APPROVALS		UL60950-1, C-UL (CSA60950-1), EN60950-1	
OTHERS	CASE SIZE/WEIGHT		57.9×12.7×36.8mm [2.28×0.5×1.45 inches] (W×H×D) / 75g max	
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)	

*1 At rated input(DC48V), rated load, and aluminum base plate temperature 25℃.
*2 Ripple and ripple noise is measured by using measuring board with recommended capacitor Co & the film capacitor 0.1μF.
*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
*4 When the input voltage is in the range of DC36-40V, output voltage is limited. Refer to the manual.



※ Tolerance : ±0.3 [±0.012]
※ Weight : 75g max
※ Base Plate : Aluminum
※ Dimensions in mm, [ ]=inches
※ Mounting hole screwing torque : 0.49N・m (5.0kgf・cm) max

※ Recommended size for processing PCB
(TOP VIEW)



※ Dimensions in mm, [ ]=inches
※ Div.:0.5inch