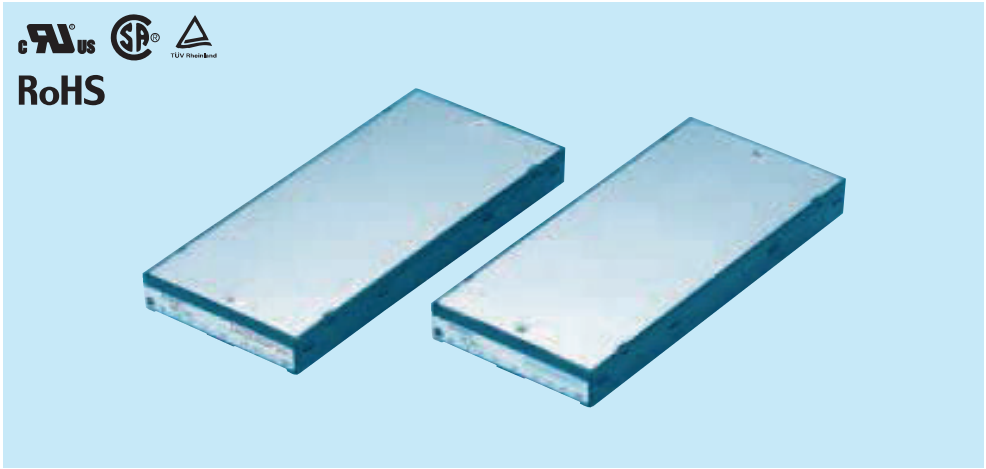
COSEL DC-DC Converters Power Module type

DAS100

Ordering information

DA	S	100	□	05	
①	②	③	④	⑤	



①Series name
②Single output
③Output wattage
④Input voltage
F :DC88 - 370V
48 :DC36 - 72V
⑤Output voltage

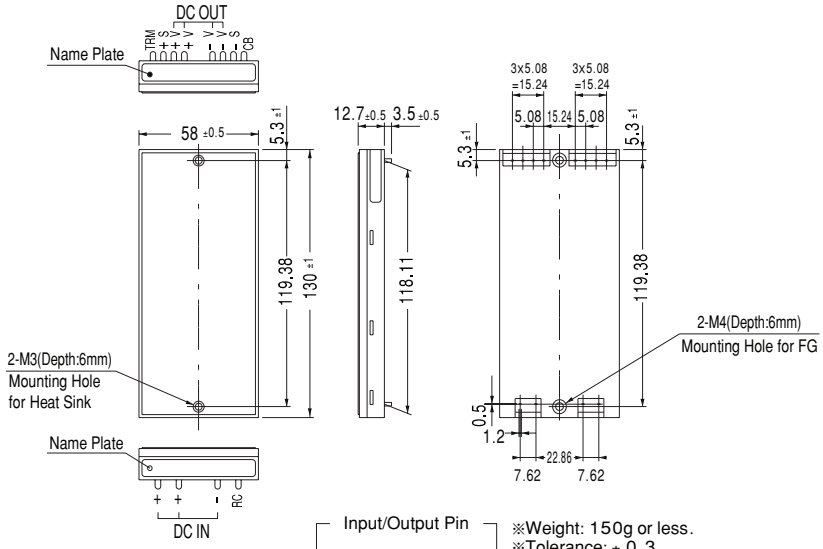
MODEL	DAS100F05	DAS100F12	DAS100F24	DAS1004805	DAS1004812
MAX OUTPUT WATTAGE[W]	100	102	100.8	100	102
DC OUTPUT	5V 20A	12V 8.5A	24V 4.2A	5V 20A	12V 8.5A

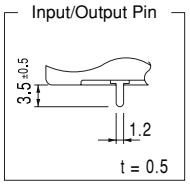
SPECIFICATIONS

	MODEL		DAS100F05	DAS100F12	DAS100F24	DAS1004805	DAS1004812
INPUT	VOLTAGE[V]		DC88 - 370			DC36 - 72	
	CURRENT[A]		1.0typ (DCIN 130V, Io=100%) 0.5typ (DCIN 260V, Io=100%)			2.60typ (DCIN 48V, Io=100%)	2.59typ (DCIN 48V, Io=100%)
	EFFICIENCY[%]		82typ	82typ	82typ	80typ	82typ
	LEAKAGE CURRENT[mA]		0.3max (By UL, CSA, VDE and DEN-AN)				
OUTPUT	VOLTAGE[V]		5	12	24	5	12
	CURRENT[A]		20	8.5	4.2	20	8.5
	LINE REGULATION[mV]		20max	48max	96max	20max	48max
	LOAD REGULATION[mV]		40max	100max	150max	40max	100max
	RIPPLE[mVp-p]	0 to +85℃ ※1	80max	120max	120max	80max	120max
		-10 - 0℃ ※1	140max	160max	160max	140max	160max
	RIPPLE NOISE[mVp-p]	0 to +85℃ ※1	150max	200max	200max	150max	200max
		-10 - 0℃ ※1	190max	230max	230max	190max	230max
	TEMPERATURE REGULATION[mV]	0 to +85℃	85max	204max	408max	85max	210max
		-10 to +85℃	95max	228max	456max	95max	230max
	DRIFT[mV]	※2	20max	48max	96max	20max	48max
	START-UP TIME[ms]		200max (DCIN 88V, Io=100%)			200max (DCIN 36V, Io=100%)	
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]		Fixed (TRM pin open)±10% adjustable by external VR				
	OUTPUT VOLTAGE SETTING[V]		4.85 - 5.35	11.4 - 12.6	22.8 - 25.2	4.85 - 5.35	11.4 - 12.6
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION		Works at 115 - 140% of rating				
	REMOTE SENSING		Provided				
	REMOTE ON/OFF		Between RC and -side of input:short - 1.2V ・・・output ON, 2.4 - 5.5V(or open) ・・・output OFF, Compatible TTL				
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)			AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)	
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (At Room Temperature)			AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)	
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA max, DC500V 50MΩ min (At Room Temperature)				
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-10 to +85℃ (Aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max				
	STORAGE TEMP.,HUMID.AND ALTITUDE		-40 to +85℃, 20 - 95%RH (Non condensing), 9,000m (30,000feet) 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 X, Y and Z axis				
SAFETY	AGENCY APPROVALS		UL60950-1, EN60950-1, CSA C22.2 No.60950-1 Complies with DEN-AN			Complies with UL60950-1, CSA C22.2 No.60950-1 and EN60950-1	
OTHERS	CASE SIZE/WEIGHT		58×12.7×130mm (W×H×D) / 150g max				
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)				

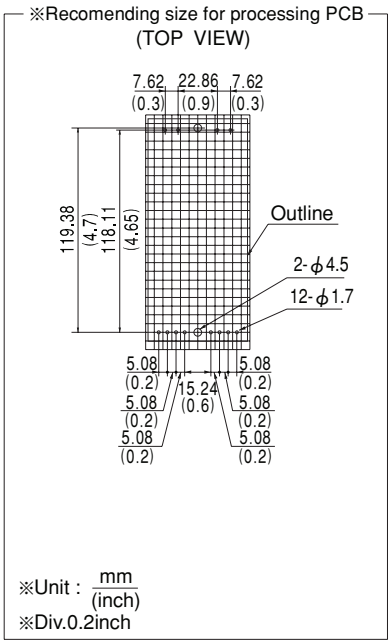
※1 Measured by attaching the electrolytic capacitor of 220μF at output.
※2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃,with the input voltage held constant at the rated input/output.
※ Parallel operation with other model is not possible.

External view



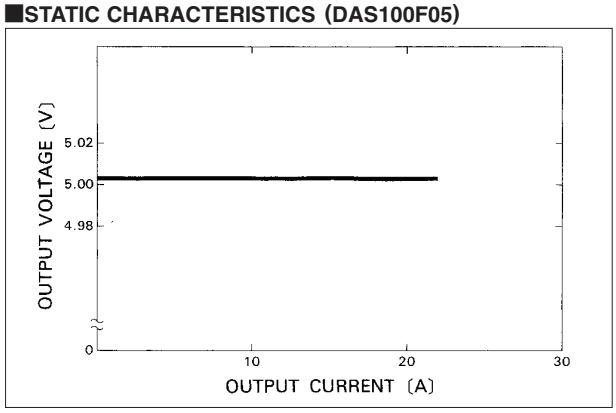


※Weight: 150g or less.
※Tolerance: ± 0.3
※Case: PBT
※Base Plate: Aluminum
※Dimensions in mm.
※Mounting torque
• Mounting Hole for Heat Sink:
0.4N·m (5.0kgf·cm) max
• Mounting Hole for FG:
1.2N·m (12.8kgf·cm) max

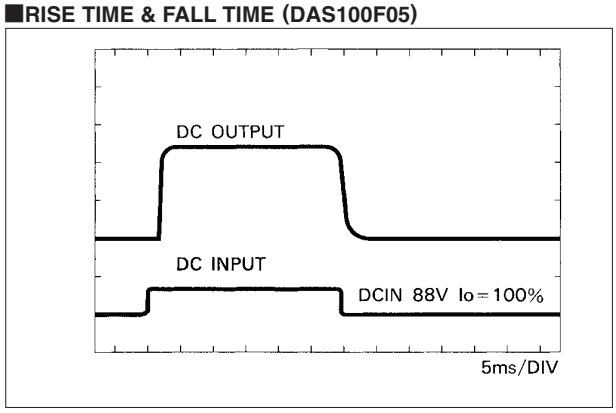


Performance data

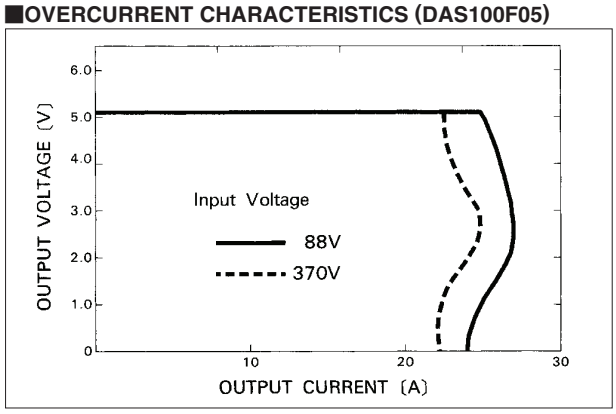
■STATIC CHARACTERISTICS (DAS100F05)



■RISE TIME & FALL TIME (DAS100F05)



■OVERCURRENT CHARACTERISTICS (DAS100F05)



■DERATING CURVE