



DC-DC Converters PCB Mount type

MGFW30

Ordering Information

MGF W 30 24 05 -

① ② ③ ④ ⑤ ⑥



RoHS



- ① Series name
 ② Dual output
 ③ Output wattage
 ④ Input voltage
 ⑤ Output voltage
 ⑥ Optional
 G: Capacitor between Input and Output is removed.
 R: with Remote ON/OFF (Positive logic control)

MODEL	MGFW302405	MGFW302412	MGFW302415	MGFW304805	MGFW304812	MGFW304815
MAX OUTPUT WATTAGE[W]	20	30	30	20	30	30
DC OUTPUT	VOLTAGE[V] *1	±5 or +10	±12 or +24	±15 or +30	±5 or +10	±12 or +24
	CURRENT[A]	2	1.25	1	2	1.25

SPECIFICATIONS

	MODEL	MGFW302405	MGFW302412	MGFW302415	MGFW304805	MGFW304812	MGFW304815
INPUT	VOLTAGE[V]	DC9 - 36			DC18 - 76		
	CURRENT[A] *2	0.98typ	1.42typ	1.44typ	0.49typ	0.71typ	0.72typ
	EFFICIENCY[%] *2	85typ	88typ	87typ	85typ	88typ	87typ
OUTPUT	VOLTAGE[V]	±5(+10)	±12(+24)	±15(+30)	±5(+10)	±12(+24)	±15(+30)
	CURRENT[A]	2	1.25	1	2	1.25	1
	LINE REGULATION[mV]	40max	60max	75max	40max	60max	75max
	LOAD REGULATION[mV]	*3 500max *5	600max	750max	500max *5	600max	750max
		*4 250max	480max	600max	250max	480max	600max
	RIPPLE[mVp-p]	-20 to +60°C	100max	100max	100max	100max	100max
		*5 40 to -20°C	120max	120max	120max	120max	120max
	RIPPLE NOISE[mVp-p]	-20 to +60°C	100max	100max	100max	100max	100max
		*5 40 to -20°C	150max	150max	150max	150max	150max
	TEMPERATURE REGULATION[mV]	-20 to +60°C	50max	150max	180max	50max	150max
*5 40 to +60°C		80max	240max	290max	80max	240max	
DRIFT[mV] *7	50max	50max	60max	50max	50max	60max	
START-UP TIME[ms]	30max (Minimum input, I _o =100%)						
OUTPUT VOLTAGE SETTING[V] *8	4.935 - 5.240	11.765 - 12.492	14.602 - 15.505	4.935 - 5.240	11.765 - 12.492	14.602 - 15.505	
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION[V]	Works over 120 to 160% of rating (Total of +V and -V)					
	REMOTE ON/OFF	Provided (Negative logic L:ON, H:OFF)					
ISOLATION	INPUT-OUTPUT	DC1,500V 1minute, Cutoff current = 10mA, DC500V 1,000MΩ min (20±15°C)					
	INPUT-CASE	DC1,000V 1minute, Cutoff current = 10mA, DC500V 1,000MΩ min (20±15°C)					
	OUTPUT-CASE	DC1,000V 1minute, Cutoff current = 10mA, DC500V 1,000MΩ min (20±15°C)					
ENVIRONMENT	OPERATING TEMP,HUMID.AND ALTITUDE	-40 to +85°C, 20 to 95%RH (Non condensing) (Required Derating), 3,000m (10,000feet) max					
	STORAGE TEMP,HUMID.AND ALTITUDE	-40 to +100°C, 20 to 95%RH (Non condensing), 9,000m (30,000feet) max					
	VIBRATION	10 - 55Hz, 98.0m/s ² (10G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT	490.3m/s ² (50G), 11ms, once each along X, Y and Z axis					
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1					
OTHERS	CASE SIZE/WEIGHT	25.4 x 9.9 x 50.8mm [1 x 0.39 x 2 inches] (W x H x D) / 40g max					
	COOLING METHOD	Convection/Forced air					

*1 Single output +10V, +24V, +30V with no use of COM.

*2 Rated input 12V, 24V or 48V DC I_o=100%

*3 Symmetrical loading from 5% to 100%.

*4 Symmetrical loading from 20% to 100%.

*5 Refer to the instruction manual 11.

*6 Ripple and Ripple Noise is measured by using test board with ceramic capacitor 22μF at 50mm from output pins. (20MHz Oscilloscope)

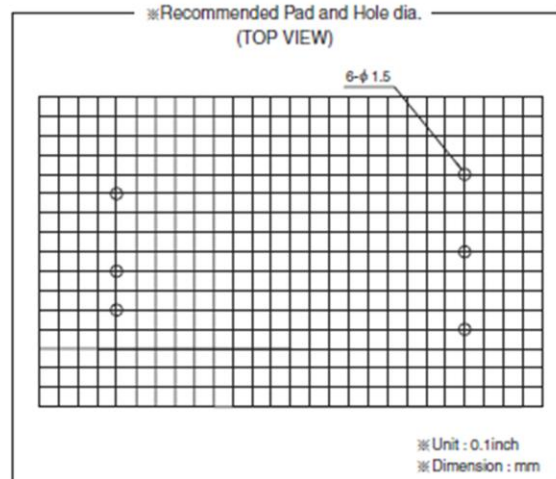
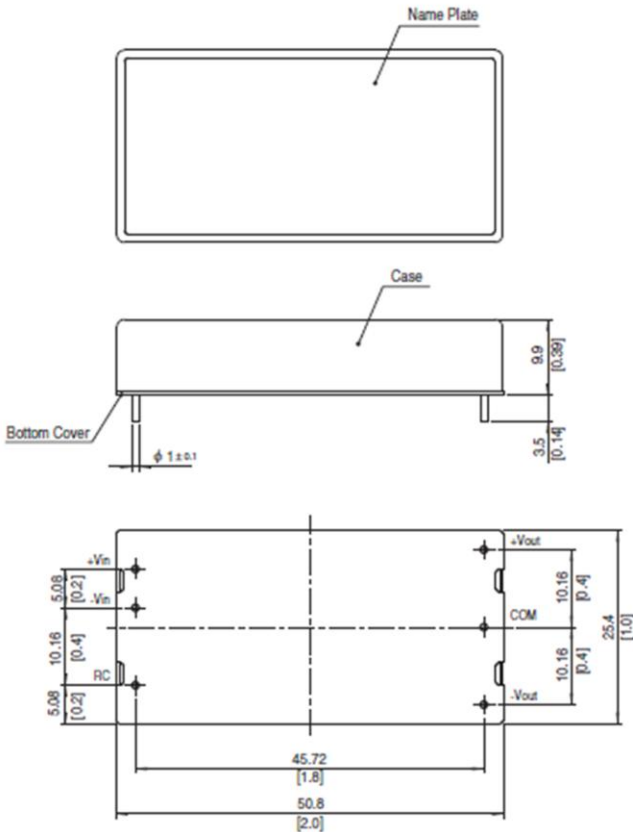
*7 Drift is the DC output accuracy for eight hours period after a half-hour warm-up at 25°C.

*8 Rated input voltage (DC24V, DC48V), rated output wattage, ambient temperature at 25°C.

* Parallel operation with other model is not possible.



electronic powersolutions



- ※ Tolerance ± 0.5 [± 0.02]
- ※ Dimensions in mm, []-inches
- ※ Pin terminal material : Copper
- ※ Plating treatment of terminal : Lead free plating
- ※ Case material : Brass
- ※ Plating treatment of case : Nickel plating
- ※ Bottom Cover : FR4 (1-0.6) [1-0.024]
- ※ Please keep enough creepage distance with the pattern on PCB and other components.
- ※ Weight 40g max

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