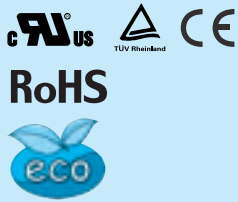


# MGFW15

MGF W 15 24 05 - □

① ② ③ ④ ⑤ ⑥



- 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	MGFW152405	MGFW152412	MGFW152415	MGFW154805	MGFW154812	MGFW154815
MAX OUTPUT WATTAGE[W]	15	15.6	15	15	15.6	15
DC OUTPUT	VOLTAGE[V] *1	±5 or +10	±12 or +24	±15 or +30	±5 or +10	±12 or +24
	CURRENT[A]	1.5	0.65	0.5	1.5	0.65

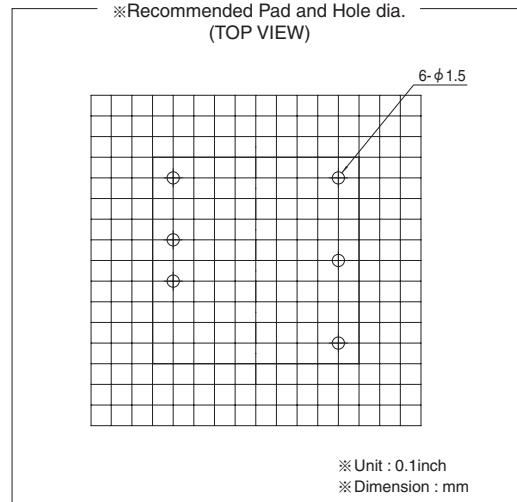
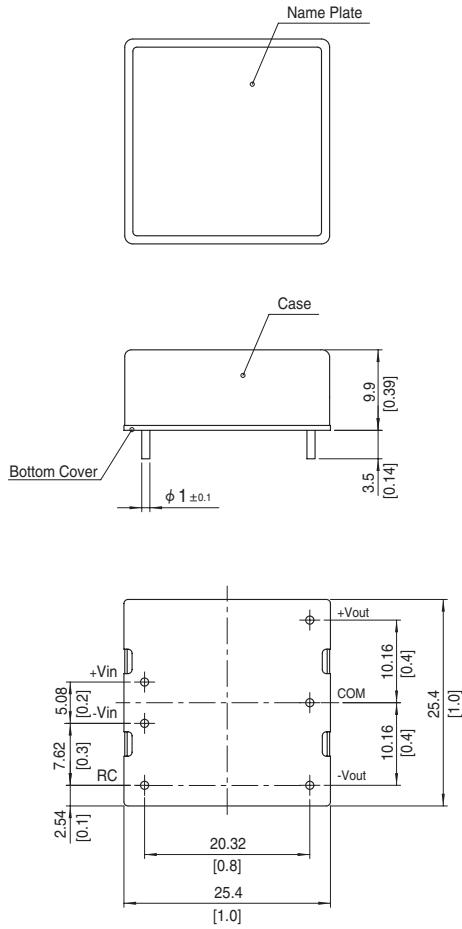
## SPECIFICATIONS

	MODEL	MGFW152405	MGFW152412	MGFW152415	MGFW154805	MGFW154812	MGFW154815	
INPUT	VOLTAGE[V]	DC9 - 36			DC18 - 76			
	CURRENT[A] *2	0.74typ	0.74typ	0.70typ	0.37typ	0.37typ	0.36typ	
	EFFICIENCY[%] *2	84typ	88typ	89typ	84typ	87typ	88typ	
OUTPUT	VOLTAGE[V]	±5(+10)	±12(+24)	±15(+30)	±5(+10)	±12(+24)	±15(+30)	
	CURRENT[A]	1.5	0.65	0.5	1.5	0.65	0.5	
	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] *6	-20 to +60°C	100max	100max	100max	100max	100max	100max
		-40 to -20°C	120max	120max	120max	120max	120max	120max
	RIPPLE NOISE[mVp-p] *6	-20 to +60°C	100max	100max	100max	100max	100max	100max
		-40 to -20°C	150max	150max	150max	150max	150max	150max
	TEMPERATURE REGULATION[mV]	-20 to +60°C	50max	150max	180max	50max	150max	180max
		-40 to +60°C	80max	240max	290max	80max	240max	290max
DRIFT[mV] *7	50max	50max	60max	50max	50max	60max		
START-UP TIME[ms]	30max (Minimum input, Io=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						
	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 ALTIITUDE	-40 to +85°C, 20 to 95%RH (Non condensing) (Required Derating), 3,000m (10,000feet) max						
	STORAGE TEMP.,HUMID.AND ALTIITUDE	-40 to +100°C, 20 to 95%RH (Non condensing), 9,000m (30,000feet) max						
	VIBRATION	10 - 55Hz, 98.0m/s <sup>2</sup> (10G), 3minutes period, 60minutes each along X, Y and Z axis						
	IMPACT	490.3m/s <sup>2</sup> (50G), 11ms, once each along X, Y and Z axis						
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1						
OTHERS	CASE SIZE/WEIGHT	25.4×9.9×25.4mm [1×0.39×1 inches] (W×H×D) / 20g 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 Io=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.

## External view

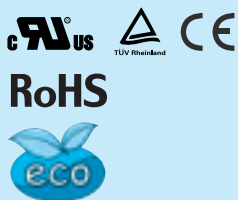


- ※ Tolerance  $\pm 0.5$  [ $\pm 0.02$ ]
- ※ Dimensions in mm, [ ]=inches
- ※ Pin terminal material : Copper
- ※ Plating treatment of terminal : Lead free plating
- ※ Case material : Brass
- ※ Plating treatment of case : Nickel plating
- ※ Bottom Cover : FR4 (t=0.6) [t=0.024]
- ※ Please keep enough creepage distance with the pattern on PCB and other components.
- ※ Weight 20g max

# MGFW30

MGF W 30 24 05 -□

① ② ③ ④ ⑤ ⑥



- 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	±15 or +30
	CURRENT[A]	2	1.25	1	2	1.25	1

## 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] *6	-20 to +60°C	100max	100max	100max	100max	100max	100max
		-40 to -20°C	120max	120max	120max	120max	120max	120max
	RIPPLE NOISE[mVp-p] *6	-20 to +60°C	100max	100max	100max	100max	100max	100max
		-40 to -20°C	150max	150max	150max	150max	150max	150max
	TEMPERATURE REGULATION[mV]	-20 to +60°C	50max	150max	180max	50max	150max	180max
		-40 to +60°C	80max	240max	290max	80max	240max	290max
DRIFT[mV] *7	50max	50max	60max	50max	50max	60max		
START-UP TIME[ms]	30max (Minimum input, Io=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 <sup>2</sup> (10G), 3minutes period, 60minutes each along X, Y and Z axis						
	IMPACT	490.3m/s <sup>2</sup> (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 Io=100%

\*3 Symmetrical loading from 5% to 100%.

\*4 Symmetrical loading from 20% to 100%.

\*5 Refer to the instruction manual 11.

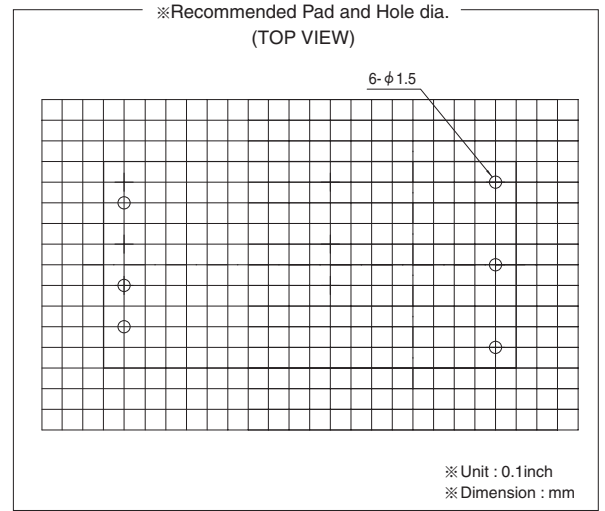
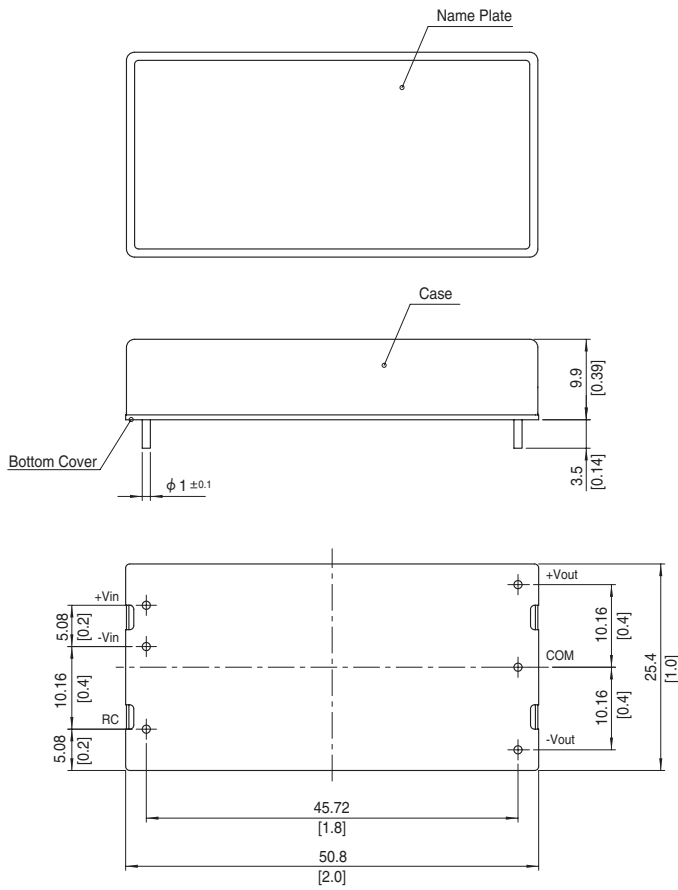
\*6 Ripple and Ripple Noise is measured by using test board with ceramic capacitor 22μF at 50mm from output pins. (20MHz Oscilloscope)

\*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.

External view



- ※ Tolerance  $\pm 0.5$  [ $\pm 0.02$ ]
- ※ 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 (t=0.6) [t=0.024]
- ※ Please keep enough creepage distance with the pattern on PCB and other components.
- ※ Weight 40g max