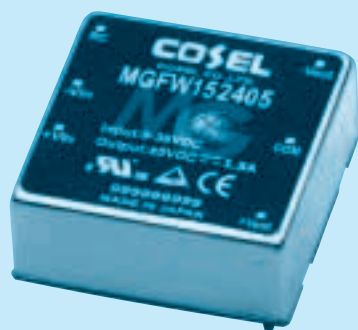




- ① Series name
 ② Dual output
 ③ Output wattage
 ④ Input voltage
 ⑤ Output voltage
 ⑥ Optional
 G : Capacitor between
 Input and Output is removed.
 R : with Remote ON/OFF
 (Positive logic control)

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℃ 100max	100max	100max	100max	100max	100max
		-40 to -20℃ 120max	120max	120max	120max	120max	120max
	RIPPLE NOISE[mVp-p] *6	-20 to +60℃ 100max	100max	100max	100max	100max	100max
		-40 to -20℃ 150max	150max	150max	150max	150max	150max
	TEMPERATURE REGULATION[mV]	-20 to +60℃ 50max	150max	180max	50max	150max	180max
		-40 to +60℃ 80max	240max	290max	80max	240max	290max
	DRIFT[mV] *7	50max	50max	60max	50max	50max	60max
PROTECTION CIRCUIT AND OTHERS	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
	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically					
ISOLATION	REMOTE ON/OFF	Provided (Negative logic L:ON, H:OFF)					
	INPUT-OUTPUT	DC1,500V 1minute, Cutoff current = 10mA, DC500V 1,000MΩ min (20±15℃)					
	INPUT-CASE	DC1,000V 1minute, Cutoff current = 10mA, DC500V 1,000MΩ min (20±15℃)					
ENVIRONMENT	OUTPUT-CASE	DC1,000V 1minute, Cutoff current = 10mA, DC500V 1,000MΩ min (20±15℃)					
	OPERATING TEMP., HUMID. AND ALTITUDE	-40 to +85℃, 20 to 95%RH (Non condensing) (Required Derating), 3,000m (10,000feet) max					
	STORAGE TEMP., HUMID. AND ALTITUDE	-40 to +100℃, 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					
SAFETY	IMPACT	490.3m/s ² (50G), 11ms, once each along X, Y and Z axis					
	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1					
OTHERS	CASE SIZE/WEIGHT	25.4×9.9×25.4mm (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%.

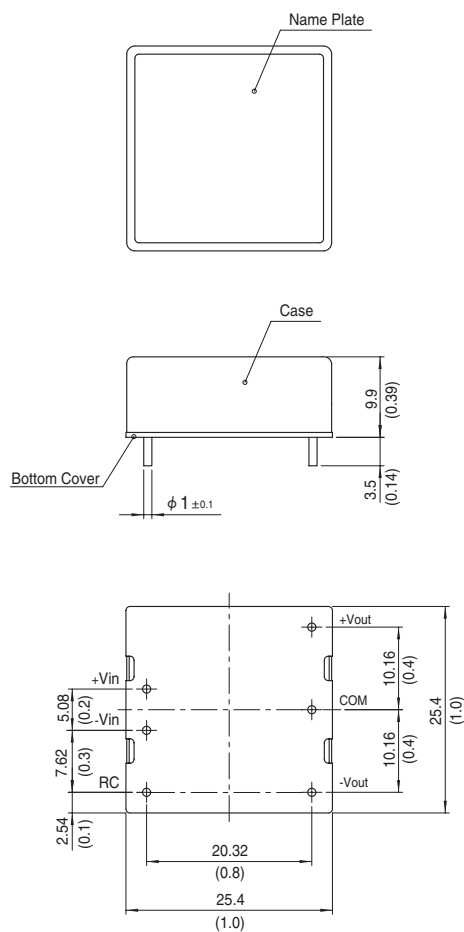
*5 Refer to the instruction manual 11.

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

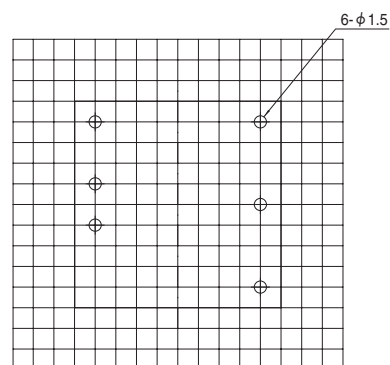
*7 Drift is the DC output accuracy for eight hours period after a half-hour warm-up at 25℃.

*8 Rated input voltage (DC24V, DC48V), rated output wattage, ambient temperature at 25℃. Parallel operation with other model is not possible.

External view

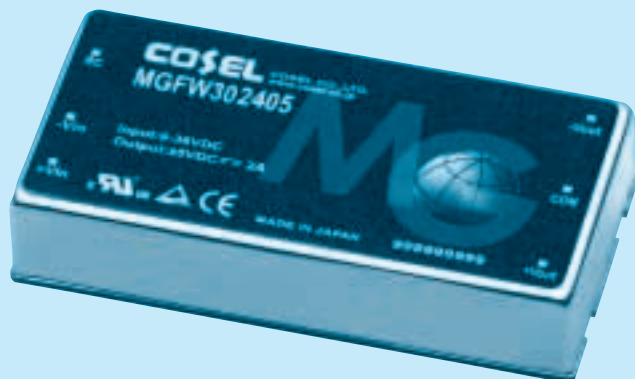


※Recommended Pad and Hole dia.
(TOP VIEW)



※ Unit : 0.1inch
※ Dimension : mm

- ※ Tolerance ± 0.5
- ※ Dimensions in mm (inch)
- ※ 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)
- ※ Please keep enough creepage distance with the pattern on PCB and other components.
- ※ Mass 20g max



- 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	100max
		-40 to -20°C 120max	120max	120max	120max	120max	120max
	RIPPLE NOISE[mVp-p]	-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
PROTECTION CIRCUIT AND OTHERS	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
	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)					
ISOLATION	REMOTE ON/OFF	Provided (Negative logic L:ON, H:OFF)					
	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	25.4×9.9×50.8mm (W×H×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.

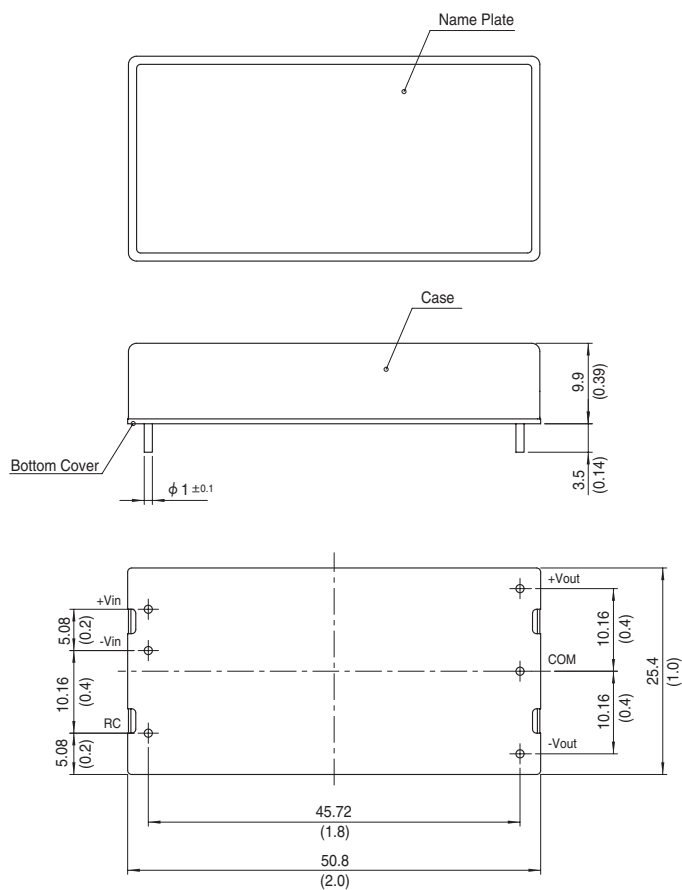
*6 Ripple and Ripple Noise is measured by using test board with ceramic capacitor 22μF at 50mm from output pins. (20MHz Oscilloscope)

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

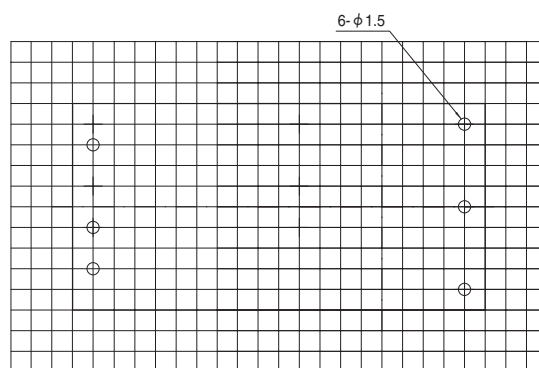
*8 Rated input voltage (DC24V, DC48V), rated output wattage, ambient temperature at 25°C.

* Parallel operation with other model is not possible.

External view



※Recommended Pad and Hole dia.
(TOP VIEW)



※ Unit : 0.1inch
※ Dimension : mm

- ※ Tolerance ± 0.5
- ※ Dimensions in mm (inch)
- ※ 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)
- ※ Please keep enough creepage distance with the pattern on PCB and other components.
- ※ Mass 40g max