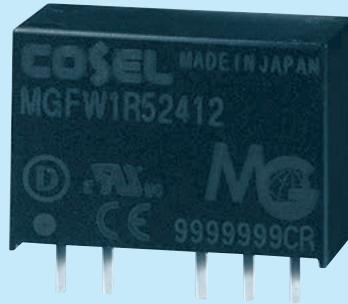


MGFW1R5

MGF ① W ② 1R5 ③ 24 ④ 12 ⑤ - □ ⑥



- ① Series name
- ② Dual output
- ③ Output wattage
- ④ Input voltage
- ⑤ Output voltage
- ⑥ Optional

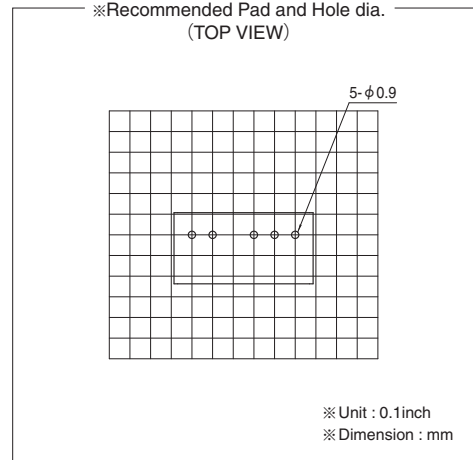
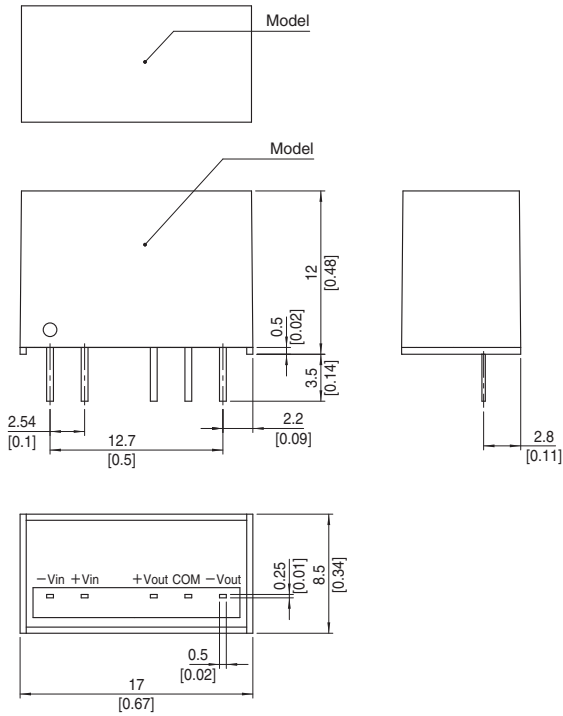
| MODEL | MGFW1R52412 | MGFW1R52415 | MGFW1R54812 | MGFW1R54815 |
|-----------------------|---------------|-------------|-------------|-------------|
| MAX OUTPUT WATTAGE[W] | 1.56 | 1.50 | 1.56 | 1.50 |
| DC OUTPUT | VOLTAGE[V] *1 | ±12 or +24 | ±15 or +30 | ±12 or +24 |
| | CURRENT[A] | 0.065 | 0.05 | 0.065 |

SPECIFICATIONS

| | MODEL | MGFW1R52412 | MGFW1R52415 | MGFW1R54812 | MGFW1R54815 | |
|---------------------------|---|--|---------------|---|-------------|--------|
| INPUT | VOLTAGE[V] | DC9 - 36 (Surge voltage 50V, 100ms max) | | DC18 - 76 (Surge voltage 100V, 100ms max) | | |
| | CURRENT[A] *2 | 0.081typ | 0.079typ | 0.041typ | 0.040typ | |
| | EFFICIENCY[%] *2 | 81typ | 80typ | 81typ | 79typ | |
| OUTPUT | VOLTAGE[V] | ±12 (+24) | ±15 (+30) | ±12 (+24) | ±15 (+30) | |
| | CURRENT[A] | 0.065 | 0.05 | 0.065 | 0.05 | |
| | LINE REGULATION[mV] | 60max | 75max | 60max | 75max | |
| | LOAD REGULATION[mV] | *3 | 480max | 600max | 480max | 600max |
| | | *4 | 600max | 750max | 600max | 750max |
| | RIPPLE[mVp-p] *5 | 150max | 150max | 150max | 150max | |
| | RIPPLE NOISE[mVp-p] *5 | 200max | 200max | 200max | 200max | |
| | TEMPERATURE REGULATION[mV] | -20 to +85°C | 210max | 260max | 150max | 180max |
| | | -40 to +85°C | 320max | 390max | 240max | 290max |
| | DRIFT[mV] *6 | 48max | 60max | 48max | 60max | |
| START-UP TIME[ms] | 30max (Minimum input, I _o =100%) | | | | | |
| OUTPUT VOLTAGE SETTING[V] | 11.64 - 12.36 | 14.55 - 15.45 | 11.64 - 12.36 | 14.55 - 15.45 | | |
| PROTECTION CIRCUIT | OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | | | |
| ISOLATION | INPUT-OUTPUT | DC1,500V or AC1,000V 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), 5,000m (16,400feet) 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), 3minute 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 | 17.0 X 12.0 X 8.5mm [0.67 X 0.48 X 0.34 inches] (W X H X D) / 4g max | | | | |
| | COOLING METHOD | Convection/Forced air | | | | |

*1 Single output +24V, +30V with no use of COM.
 *2 Rated input 24V or 48V DC I_o=100%
 *3 Symmetrical loading from 20% to 100%.
 *4 Symmetrical loading from 0% to 100%.
 *5 Ripple and Ripple Noise is measured by using test board with ceramic capacitor 1μF at 50mm from output pins.
 *6 Drift is the DC output accuracy for eight hours period after a half-hour warm-up at 25°C.
 * Parallel operation with other model is not possible.

External view

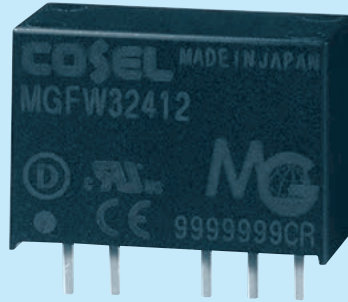


- ※ Tolerance ± 0.5 [± 0.02]
- ※ Dimensions in mm, []= inches
- ※ Pin terminal material : Copper
- ※ Planting treatment of terminal : Lead free plating
- ※ Case material : PBT
- ※ Weight 4g max

MGFW3

MGF W 3 24 12 - □

① ② ③ ④ ⑤ ⑥



- ① Series name
- ② Dual output
- ③ Output wattage
- ④ Input voltage
- ⑤ Output voltage
- ⑥ Optional

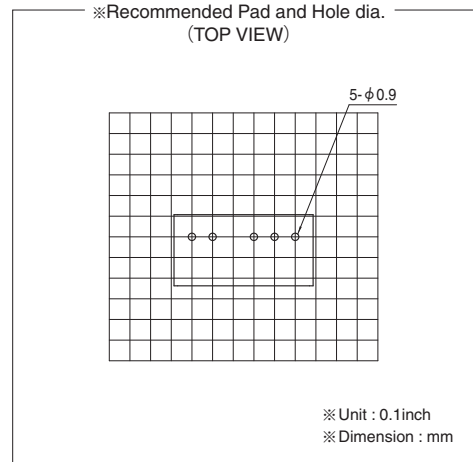
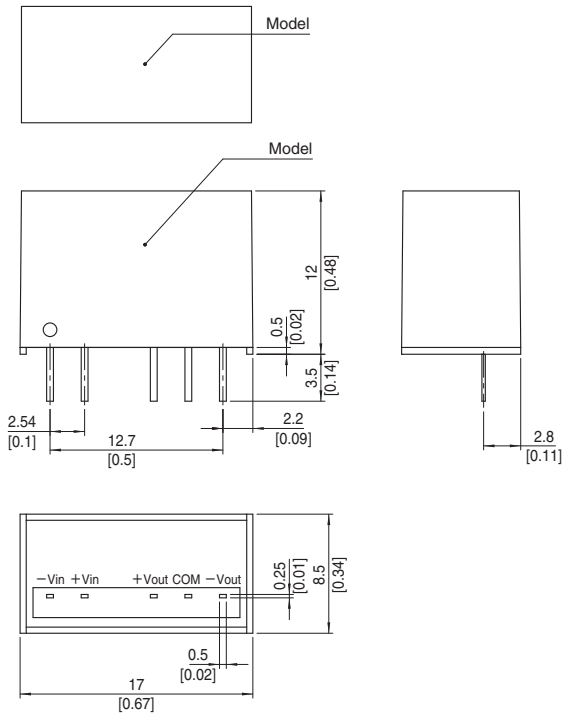
| MODEL | MGFW32412 | MGFW32415 | MGFW34812 | MGFW34815 |
|-----------------------|---------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 3.12 | 3.00 | 3.12 | 3.00 |
| DC OUTPUT | VOLTAGE[V] *1 | ±12 or +24 | ±15 or +30 | ±15 or +30 |
| | CURRENT[A] | 0.13 | 0.1 | 0.13 |

SPECIFICATIONS

| | MODEL | MGFW32412 | MGFW32415 | MGFW34812 | MGFW34815 | |
|---------------------------|---|---|---------------|---|-----------|--------|
| INPUT | VOLTAGE[V] | DC9 - 36 (Surge voltage 50V,100ms max) (Refer to the instruction manual for input voltage derating.) | | DC18 - 76 (Surge voltage 100V,100ms max) (Refer to the instruction manual for input voltage derating.) | | |
| | CURRENT[A] *2 | 0.16typ | 0.16typ | 0.081typ | 0.078typ | |
| | EFFICIENCY[%] *2 | 82typ | 82typ | 81typ | 81typ | |
| OUTPUT | VOLTAGE[V] | ±12 (+24) | ±15 (+30) | ±12 (+24) | ±15 (+30) | |
| | CURRENT[A] | 0.13 | 0.1 | 0.13 | 0.1 | |
| | LINE REGULATION[mV] | 60max | 75max | 60max | 75max | |
| | LOAD REGULATION[mV] | *3 | 480max | 600max | 480max | 600max |
| | | *4 | 600max | 750max | 600max | 750max |
| | RIPPLE[mVp-p] *5 | 150max | 150max | 150max | 150max | |
| | RIPPLE NOISE[mVp-p] *5 | 200max | 200max | 200max | 200max | |
| | TEMPERATURE REGULATION[mV] | -20 to +70°C | 180max | 220max | 180max | 220max |
| | | -40 to +70°C | 290max | 340max | 290max | 340max |
| | DRIFT[mV] *6 | 48max | 60max | 48max | 60max | |
| START-UP TIME[ms] | 30max (Minimum input, I _o =100%) | | | | | |
| OUTPUT VOLTAGE SETTING[V] | 11.64 - 12.36 | 14.55 - 15.45 | 11.64 - 12.36 | 14.55 - 15.45 | | |
| PROTECTION CIRCUIT | OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | | | |
| ISOLATION | INPUT-OUTPUT | DC1,500V or AC1,000V 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), 5,000m (16,400feet) 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), 3minute 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 | 17.0 X 12.0 X 8.5mm [0.67 X 0.48 X 0.34 inches] (W X H X D) / 4g max | | | | |
| | COOLING METHOD | Convection/Forced air | | | | |

- *1 Single output +24V, +30V with no use of COM.
- *2 Rated input 24V or 48V DC I_o=100%
- *3 Symmetrical loading from 20% to 100%.
- *4 Symmetrical loading from 0% to 100%.
- *5 Ripple and Ripple Noise is measured by using test board with ceramic capacitor 1μF at 50mm from output pins.
- *6 Drift is the DC output accuracy for eight hours period after a half-hour warm-up at 25°C.
- * Parallel operation with other model is not possible.

External view

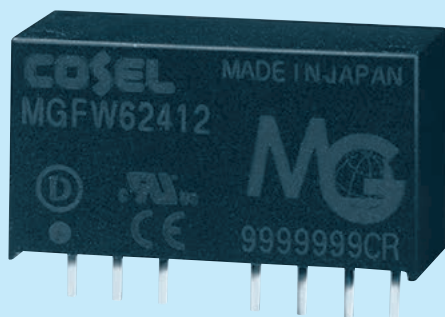


- ※ Tolerance ± 0.5 [± 0.02]
- ※ Dimensions in mm, []= inches
- ※ Pin terminal material : Copper
- ※ Planting treatment of terminal : Lead free plating
- ※ Case material : PBT
- ※ Weight 4g max

MGFW6

MGF W 6 24 12 - □

① ② ③ ④ ⑤ ⑥



- ① Series name
- ② Dual output
- ③ Output wattage
- ④ Input voltage
- ⑤ Output voltage
- ⑥ Optional
- Y2: Output voltage adjustable (+10%, -5%)

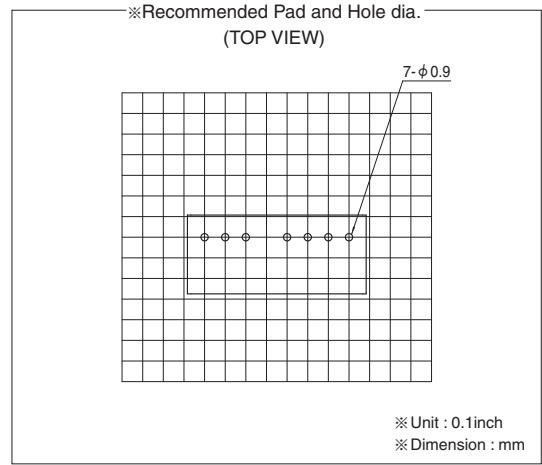
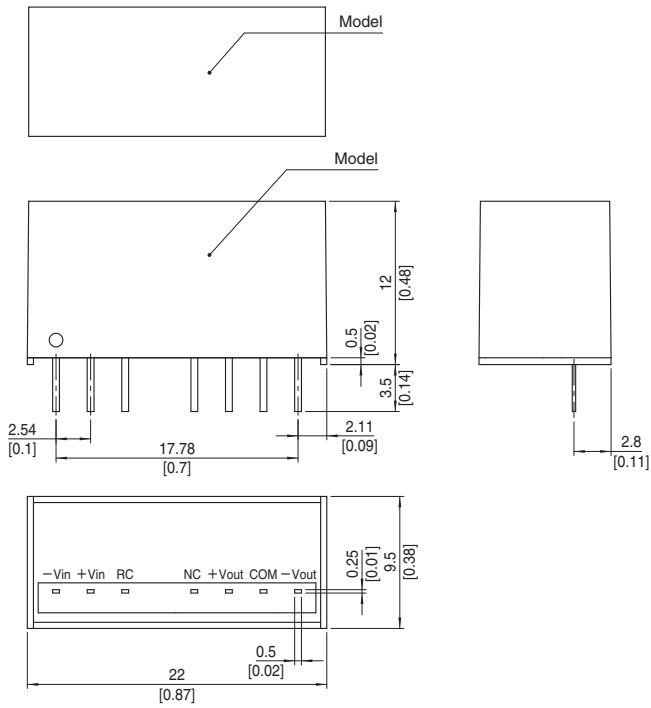
| MODEL | MGFW62412 | MGFW62415 | MGFW64812 | MGFW64815 |
|-----------------------|---------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 6.00 | 6.00 | 6.00 | 6.00 |
| DC OUTPUT | VOLTAGE[V] *1 | ±12 or +24 | ±15 or +30 | ±15 or +30 |
| | CURRENT[A] | 0.25 | 0.2 | 0.25 |

SPECIFICATIONS

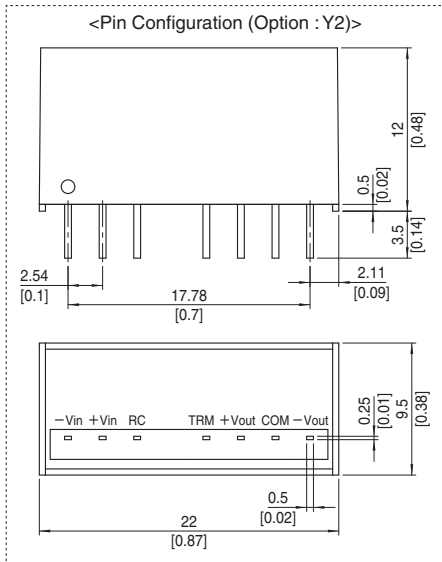
| | MODEL | MGFW62412 | MGFW62415 | MGFW64812 | MGFW64815 | |
|-------------------------------|------------------------------------|--|---------------|--|-----------|--------|
| INPUT | VOLTAGE[V] | DC9 - 36 (Surge voltage 50V,100ms max) | | DC18 - 76 (Surge voltage 100V,100ms max) | | |
| | CURRENT[A] *2 | 0.29typ | 0.29typ | 0.15typ | 0.15typ | |
| | EFFICIENCY[%] *2 | 87typ | 88typ | 88typ | 88typ | |
| OUTPUT | VOLTAGE[V] | ±12 (+24) | ±15 (+30) | ±12 (+24) | ±15 (+30) | |
| | CURRENT[A] | 0.25 | 0.2 | 0.25 | 0.2 | |
| | LINE REGULATION[mV] | 60max | 75max | 60max | 75max | |
| | LOAD REGULATION[mV] | *3 | 480max | 600max | 480max | 600max |
| | | *4 | 600max | 750max | 600max | 750max |
| | RIPPLE[mVp-p] *5 | Po=30% - | 120max | 120max | 120max | 120max |
| | | Po=0 - 30% | 360max | 360max | 360max | 360max |
| | RIPPLE NOISE[mVp-p] *5 | Po=30% - | 200max | 200max | 200max | 200max |
| | | Po=0 - 30% | 500max | 500max | 500max | 500max |
| | TEMPERATURE REGULATION[mV] | -20 to +75°C | 190max | 230max | 190max | 230max |
| | -40 to +75°C | 300max | 360max | 300max | 360max | |
| DRIFT[mV] *6 | 48max | 60max | 48max | 60max | | |
| START-UP TIME[ms] | 30max (Minimum input, Io=100%) | | | | | |
| OUTPUT VOLTAGE SETTING[V] | 11.64 - 12.36 | 14.55 - 15.45 | 11.64 - 12.36 | 14.55 - 15.45 | | |
| 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 or AC1,000V 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), 5,000m (16,400feet) 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), 3minute 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 | 22.0×12.0×9.5mm [0.87×0.48×0.38 inches] (W×H×D) / 7g max | | | | |
| | COOLING METHOD | Convection/Forced air | | | | |

*1 Single output +24V, +30V with no use of COM.
 *2 Rated input 5V, 12V, 24V or 48V DC Io=100%
 *3 Symmetrical loading from 20% to 100%.
 *4 Symmetrical loading from 0% to 100%.
 *5 Ripple and Ripple Noise is measured by using test board with ceramic capacitor 1μF at 50mm from output pins. Po:Output wattage.
 *6 Drift is the DC output accuracy for eight hours period after a half-hour warm-up at 25°C.
 * Parallel operation with other model is not possible.

External view

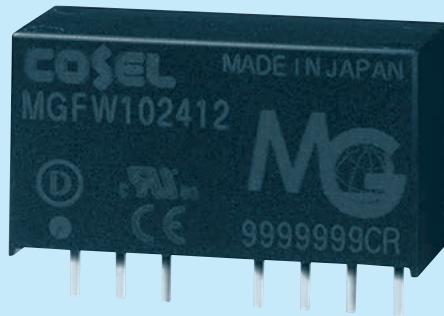


- ※ Tolerance ± 0.5 [± 0.02]
- ※ Dimensions in mm, []= inches
- ※ Pin terminal material : Copper
- ※ Planting treatment of terminal : Lead free plating
- ※ Case material : PBT
- ※ Weight 7g max



MGFW10

MGF ① W ② 10 ③ 24 ④ 12 ⑤ - □ ⑥



- ① Series name
- ② Dual output
- ③ Output wattage
- ④ Input voltage
- ⑤ Output voltage
- ⑥ Optional
- Y2: Output voltage adjustable (+10%, -5%)

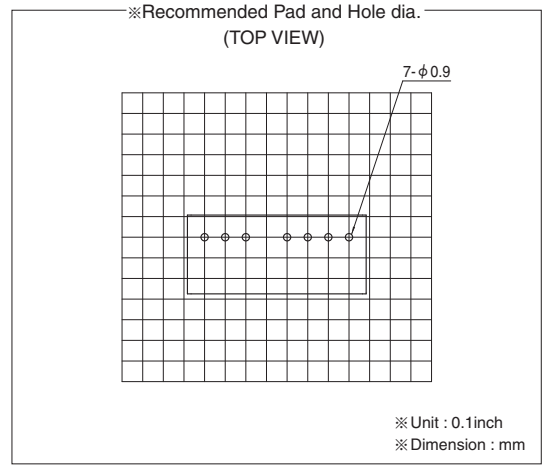
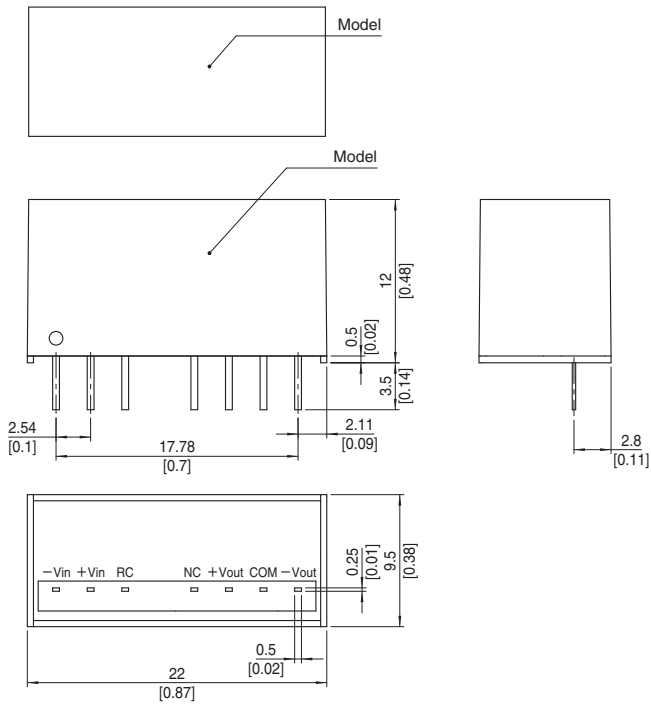
| MODEL | MGFW102412 | MGFW102415 | MGFW104812 | MGFW104815 |
|-----------------------|---------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 10.08 | 10.20 | 10.08 | 10.20 |
| DC OUTPUT | VOLTAGE[V] *1 | ±12 or +24 | ±15 or +30 | ±15 or +30 |
| | CURRENT[A] | 0.42 | 0.34 | 0.42 |

SPECIFICATIONS

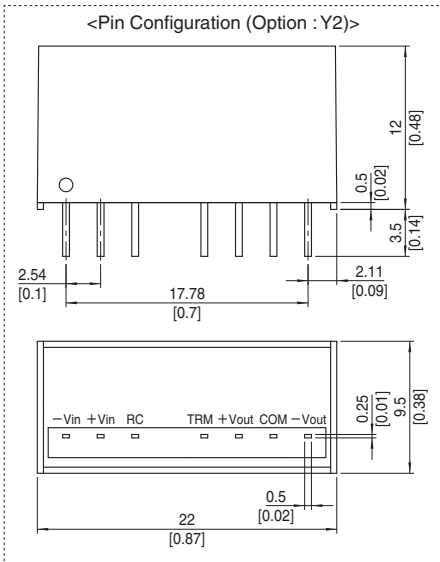
| | MODEL | MGFW102412 | MGFW102415 | MGFW104812 | MGFW104815 | |
|-------------------------------|--------------------------------------|---|---------------|---|------------|--------|
| INPUT | VOLTAGE[V] | DC9 - 36 (Surge voltage 50V,100ms max) (Refer to the instruction manual for input voltage derating.) | | DC18 - 76 (Surge voltage 100V,100ms max) (Refer to the instruction manual for input voltage derating.) | | |
| | CURRENT[A] *2 | 0.49typ | 0.49typ | 0.25typ | 0.25typ | |
| | EFFICIENCY[%] *2 | 87typ | 87typ | 87typ | 88typ | |
| OUTPUT | VOLTAGE[V] | ±12 (+24) | ±15 (+30) | ±12 (+24) | ±15 (+30) | |
| | CURRENT[A] | 0.42 | 0.34 | 0.42 | 0.34 | |
| | LINE REGULATION[mV] | 60max | 75max | 60max | 75max | |
| | LOAD REGULATION[mV] | *3 | 480max | 600max | 480max | 600max |
| | | *4 | 600max | 750max | 600max | 750max |
| | RIPPLE[mVp-p] | Po=30% - | 120max | 120max | 120max | 120max |
| | | *5 Po=0 - 30% | 360max | 360max | 360max | 360max |
| | RIPPLE NOISE[mVp-p] | Po=30% - | 200max | 200max | 200max | 200max |
| | | *5 Po=0 - 30% | 500max | 500max | 500max | 500max |
| | TEMPERATURE REGULATION[mV] | -20 to +50°C | 150max | 180max | 150max | 180max |
| -40 to +50°C | | 240max | 290max | 240max | 290max | |
| DRIFT[mV] *6 | 48max | 60max | 48max | 60max | | |
| START-UP TIME[ms] | 30max (Minimum input, Io=100%) | | | | | |
| OUTPUT VOLTAGE SETTING[V] | 11.64 - 12.36 | 14.55 - 15.45 | 11.64 - 12.36 | 14.55 - 15.45 | | |
| 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 or AC1,000V 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), 5,000m (16,400feet) 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), 3minute 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 | 22.0x12.0x9.5mm [0.87x0.48x0.38 inches] / 7g max | | | | |
| | COOLING METHOD | Convection/Forced air | | | | |

- *1 Single output +24V, +30V with no use of COM.
- *2 Rated input 5V, 12V, 24V or 48V DC Io=100%
- *3 Symmetrical loading from 20% to 100%.
- *4 Symmetrical loading from 0% to 100%.
- *5 Ripple and Ripple Noise is measured by using test board with ceramic capacitor 1μF at 50mm from output pins. Po:Output wattage.
- *6 Drift is the DC output accuracy for eight hours period after a half-hour warm-up at 25°C.
- * Parallel operation with other model is not possible.

External view



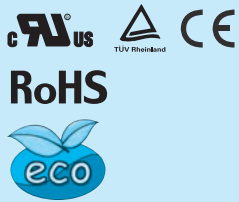
- ※ Tolerance ± 0.5 [± 0.02]
- ※ Dimensions in mm, []= inches
- ※ Pin terminal material : Copper
- ※ Planting treatment of terminal : Lead free plating
- ※ Case material : PBT
- ※ Weight 7g max



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)

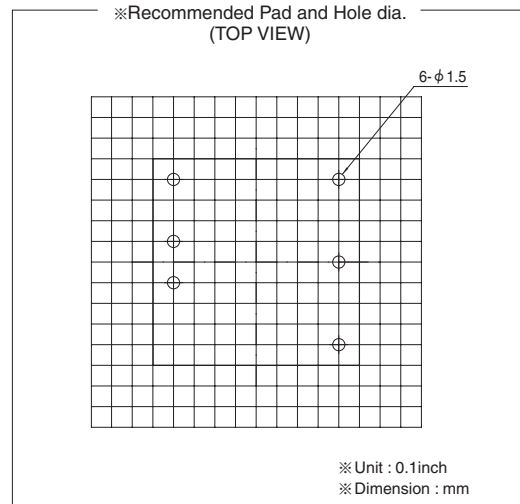
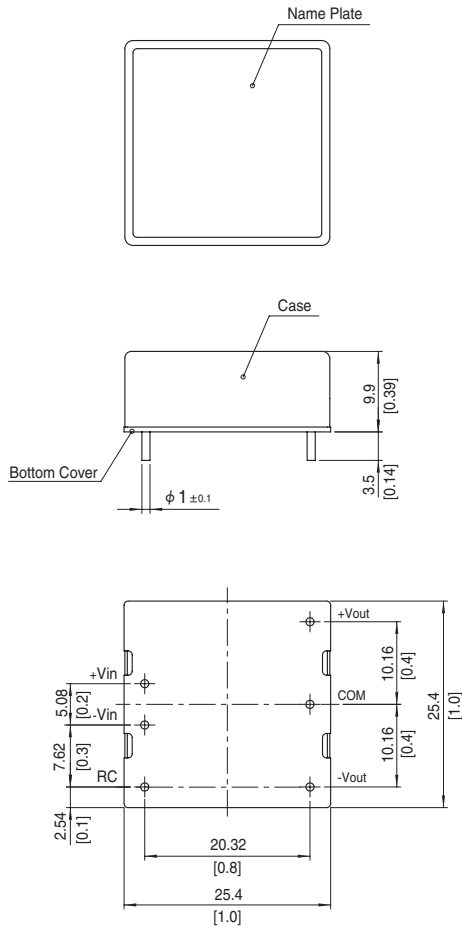
| MODEL | MGFW152405 | MGFW152412 | MGFW152415 | MGFW154805 | MGFW154812 | MGFW154815 |
|-----------------------|---------------|------------|------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 15 | 15.6 | 15 | 15 | 15.6 | 15 |
| DC OUTPUT | VOLTAGE[V] *1 | ±5 or +10 | ±12 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 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 | 25.4×9.9×25.4mm [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

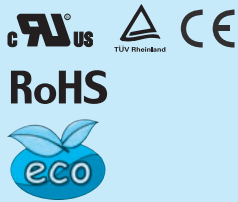


- ※ Tolerance ± 0.5 [± 0.02]
- ※ Dimensions in mm, []=inches
- ※ Pin terminal material : Copper
- ※ Plating treatment of terminal : Lead free plating
- ※ Case material : Brass
- ※ Plating treatment of case : Nickel plating
- ※ Bottom Cover : FR4 (t=0.6) [t=0.024]
- ※ Please keep enough creepage distance 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 |
| | CURRENT[A] | 2 | 1.25 | 1 | 2 | 1.25 |

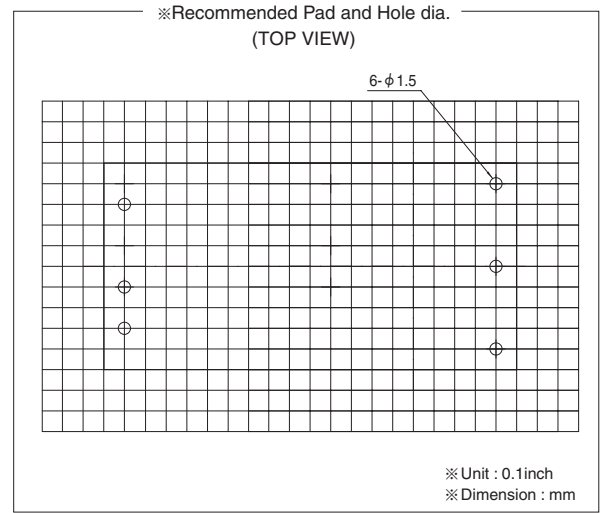
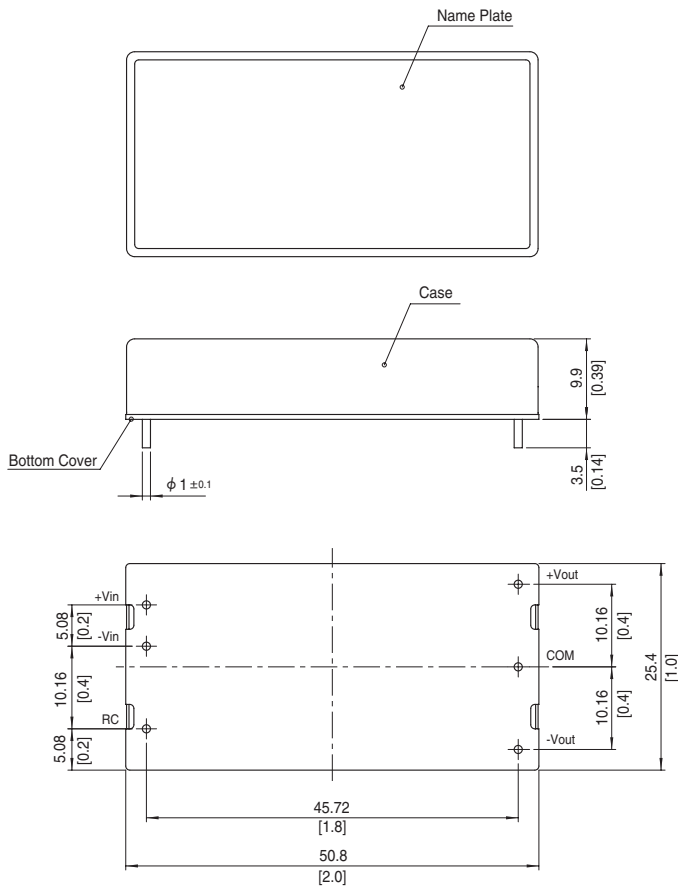
SPECIFICATIONS

| | 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] *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 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 [1 × 0.39 × 2 inches] (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



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