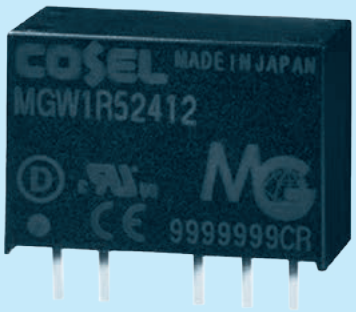
COSEL DC-DC Converters PCB Mount Type

MGW1R5

Ordering information

MG	W	1R5	24	12	-□
①	②	③	④	⑤	⑥

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



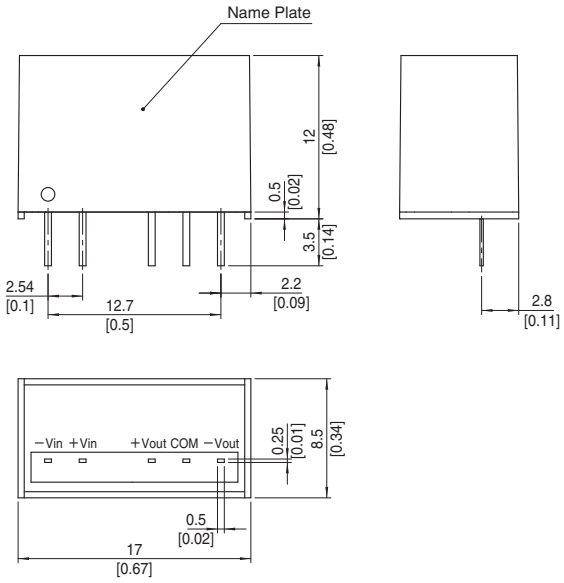
MODEL		MGW1R50512	MGW1R50515	MGW1R51212	MGW1R51215	MGW1R52412	MGW1R52415	MGW1R54812	MGW1R54815
MAX OUTPUT WATTAGE[W]		1.56	1.50	1.56	1.50	1.56	1.50	1.56	1.50
DC OUTPUT	VOLTAGE[V] *1	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30
	CURRENT[A]	0.065	0.05	0.065	0.05	0.065	0.05	0.065	0.05

SPECIFICATIONS

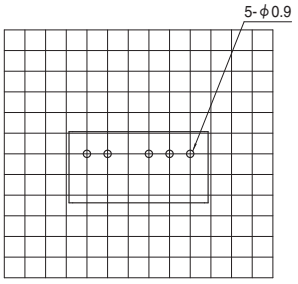
	MODEL		MGW1R50512	MGW1R50515	MGW1R51212	MGW1R51215	MGW1R52412	MGW1R52415	MGW1R54812	MGW1R54815
INPUT	VOLTAGE[V]		DC4.5 - 9 (Surge voltage 12.5V, 100ms max)		DC9 - 18 (Surge voltage 25V, 100ms max)		DC18 - 36 (Surge voltage 50V, 100ms max)		DC36 - 76 (Surge voltage 100V, 100ms max)	
	CURRENT[A]	*2	0.38typ	0.38typ	0.16typ	0.16typ	0.080typ	0.079typ	0.041typ	0.040typ
	EFFICIENCY[%]	*2	83typ	81typ	83typ	81typ	82typ	80typ	81typ	80typ
OUTPUT	VOLTAGE[V]		±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30	±12 or +24	±15 or +30
	CURRENT[A]		0.065	0.05	0.065	0.05	0.065	0.05	0.065	0.05
	LINE REGULATION[mV]		60max	75max	60max	75max	60max	75max	60max	75max
	LOAD REGULATION[mV]	*3	480max	600max	480max	600max	480max	600max	480max	600max
		*4	600max	750max	600max	750max	600max	750max	600max	750max
	RIPPLE[mVp-p]	*5	150max	150max	150max	150max	150max	150max	150max	150max
	RIPPLE NOISE[mVp-p]	*5	200max	200max	200max	200max	200max	200max	200max	200max
	TEMPERATURE REGULATION[mV]	-20 to +85℃	210max	260max	210max	260max	210max	260max	210max	260max
		-40 to +85℃	320max	390max	320max	390max	320max	390max	320max	390max
	DRIFT[mV]	*6	48max	60max	48max	60max	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	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℃)							
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE		-40 to +85℃, 20 to 95%RH (Non condensing) (Required derating), 5,000m (16,400feet) 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/s² (10G), 3minute period, 60minutes each along X, Y and Z axis							
	IMPACT		490.3m/s² (50G) 11ms, once each along X, Y and Z axis							
SAFETY	AGENCY APPROVALS		UL60950-1, C-UL, EN60950-1							
OTHERS	CASE SIZE/WEIGHT		17.0×12.0×8.5mm [0.67×0.48×0.34 inches] (W×H×D) / 4g 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. (20MHz Osilloscope)
*6 Drift is the DC output accuracy for eight hours period after a half-hour warm-up 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 [±0.02]
※ Dimensions in mm, [ ]= inches
※ Pin terminal material : Copper
※ Planting treatment of terminal : Lead free plating
※ Case material : PBT
※ Weight 4g max