

MGFS80

MGF S 80 24 05 -□

① ② ③ ④ ⑤ ⑥



- ① Series name
 - ② Single 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	MGFS80243R3	MGFS802405	MGFS802412	MGFS802415
MAX OUTPUT WATTAGE[W]	59.4	80	80.4	81
DC OUTPUT	VOLTAGE[V] *1	3.3	5	12
	CURRENT[A]	18	16	6.7
				5.4

SPECIFICATIONS

	MODEL	MGFS80243R3	MGFS802405	MGFS802412	MGFS802415	
INPUT	VOLTAGE[V]	DC9 - 36 (Surge Voltage 50V, 100ms max)				
	CURRENT[A] *2	2.69typ	3.60typ	3.56typ	3.59typ	
	EFFICIENCY[%] *2	92typ	93typ	94typ	94typ	
OUTPUT	VOLTAGE[V]	3.3	5	12	15	
	CURRENT[A]	18	16	6.7	5.4	
	LINE REGULATION[mV]	13.2max	20max	48max	60max	
	LOAD REGULATION[mV]	20max	20max	48max	60max	
	RIPPLE[mVp-p] *3	-20 to +60°C	75max	75max	100max	100max
		-40 to -20°C	100max	100max	120max	120max
		Io=0 to 10%	200max	200max	240max	240max
	RIPPLE NOISE[mVp-p] *3	-20 to +60°C	75max	75max	100max	100max
		-40 to -20°C	150max	150max	150max	150max
		Io=0 to 10%	250max	250max	270max	270max
	TEMPERATURE REGULATION[mV]	-20 to +60°C	50max	50max	150max	180max
		-40 to +60°C	80max	80max	240max	290max
	DRIFT[mV] *4	20max	20max	48max	60max	
START-UP TIME[ms]	30max (Minimum input, Rated load)					
OUTPUT VOLTAGE ADJUSTMENT RANGE	Fixed (TRM pin open) ±10% adjustable by external VR					
OUTPUT VOLTAGE SETTING[V]*5	3.296 - 3.404	4.975 - 5.137	11.857 - 12.243	14.839 - 15.321		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION	Work over 115 to 140% of rating				
	REMOTE ON/OFF	Provided (Negative logic L:ON, H:OFF)				

MODEL	MGFS80483R3	MGFS804805	MGFS804812	MGFS804815
MAX OUTPUT WATTAGE[W]	59.4	80	80.4	81
DC OUTPUT	VOLTAGE[V] *1	3.3	5	12
	CURRENT[A]	18	16	6.7
				5.4

SPECIFICATIONS

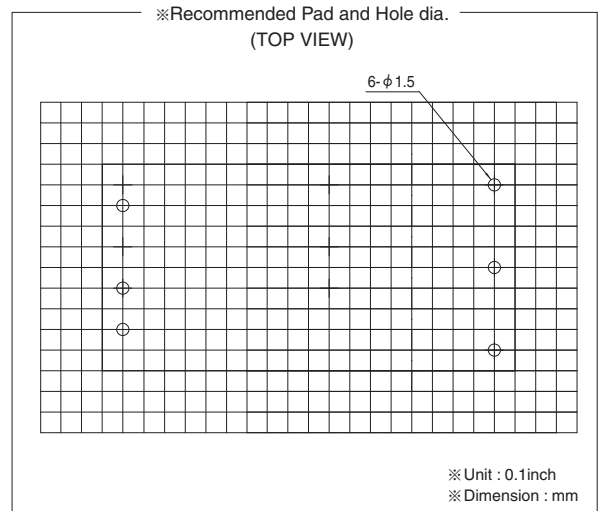
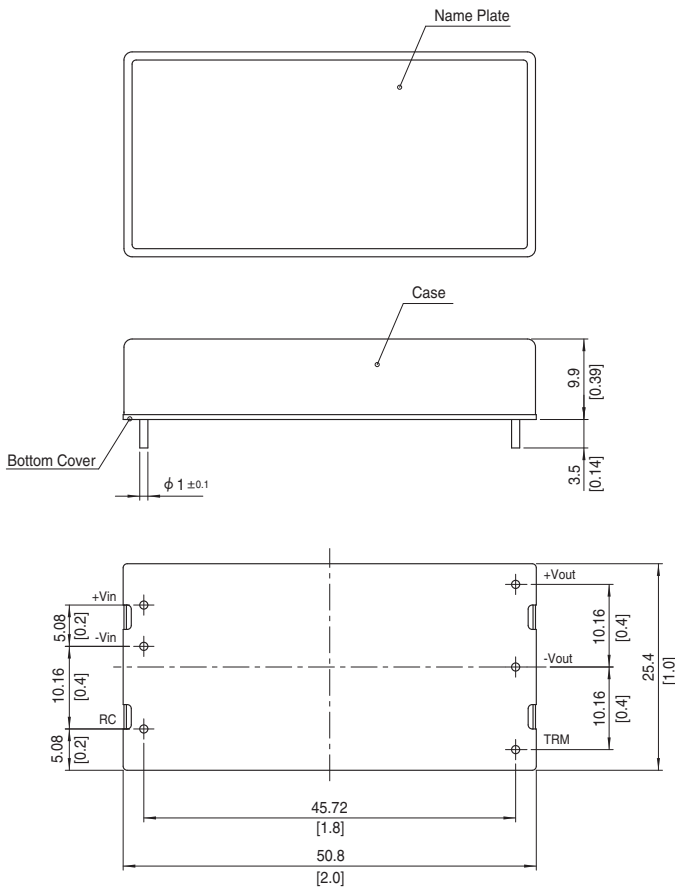
	MODEL	MGFS80483R3	MGFS804805	MGFS804812	MGFS804815	
INPUT	VOLTAGE[V]	DC18 - 76 (Surge Voltage 100V, 100ms max)				
	CURRENT[A] *2	1.35typ	1.80typ	1.78typ	1.80typ	
	EFFICIENCY[%] *2	92typ	93typ	94typ	94typ	
OUTPUT	VOLTAGE[V]	3.3	5	12	15	
	CURRENT[A]	18	16	6.7	5.4	
	LINE REGULATION[mV]	13.2max	20max	48max	60max	
	LOAD REGULATION[mV]	20max	20max	48max	60max	
	RIPPLE[mVp-p] *3	-20 to +60°C	75max	75max	100max	100max
		-40 to -20°C	100max	100max	120max	120max
		Io=0 to 10%	200max	200max	240max	240max
	RIPPLE NOISE[mVp-p] *3	-20 to +60°C	75max	75max	100max	100max
		-40 to -20°C	150max	150max	150max	150max
		Io=0 to 10%	250max	250max	270max	270max
	TEMPERATURE REGULATION[mV]	-20 to +60°C	50max	50max	150max	180max
		-40 to +60°C	80max	80max	240max	290max
	DRIFT[mV] *4	20max	20max	48max	60max	
START-UP TIME[ms]	30max (Minimum input, Rated load)					
OUTPUT VOLTAGE ADJUSTMENT RANGE	Fixed (TRM pin open) ±10% adjustable by external VR					
OUTPUT VOLTAGE SETTING[V]*5	3.296 - 3.404	4.975 - 5.137	11.857 - 12.243	14.839 - 15.321		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION	Work over 115 to 140% of rating				
	REMOTE ON/OFF	Provided (Negative logic L:ON, H:OFF)				

GENERAL SPECIFICATIONS

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), 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), 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	UL62368-1, C-UL(CSA62368-1), EN62368-1
OTHERS	CASE SIZE/WEIGHT	25.4 X 9.9 X 50.8mm (W X H X D) / 50g max
	COOLING METHOD	Convection/Forced air

- *1 MGFW80xx12/MGFW80xx15 is available as single output +24V/+30V
- *2 Rated input voltage (DC24V, DC48V) Io=100%
- *3 Ripple and Ripple Noise is measured by using test board with ceramic capacitor 22μF and Recommended Capacitance at 50mm from output pins. (20MHz Oscilloscope)
- *4 Drift is the DC output accuracy for eight hour period after a half-hour warm-up at 25°C
- *5 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 50g max