

MGFS40

MGF S 40 24 05 -□

- 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	MGFS40053R3	MGFS400505	MGFS400512	MGFS400515	MGFS40243R3	MGFS402405	MGFS402412	MGFS402415
MAX OUTPUT WATTAGE[W]	26.4	30	30	30	33	40	40.8	40.5
DC OUTPUT	VOLTAGE[V] *1	3.3	5	12	15	3.3	5	12
	CURRENT[A]	8	6	2.5	2	10	8	3.4

SPECIFICATIONS

	MODEL	MGFS40053R3	MGFS400505	MGFS400512	MGFS400515	MGFS40243R3	MGFS402405	MGFS402412	MGFS402415
INPUT	VOLTAGE[V]	DC4.5 - 13 (Surge Voltage 15V, 100ms max)				DC9 - 36 (Surge Voltage 50V, 100ms max)			
	CURRENT[A] *2	6.21typ	6.90typ	6.90typ	6.82typ	1.54typ	1.83typ	1.85typ	1.83typ
	EFFICIENCY[%] *2	85typ	87typ	87typ	88typ	89typ	91typ	92typ	92typ
OUTPUT	VOLTAGE[V]	3.3	5	12	15	3.3	5	12	15
	CURRENT[A]	8	6	2.5	2	10	8	3.4	2.7
	LINE REGULATION[mV]	13.2max	20max	48max	60max	13.2max	20max	48max	60max
	LOAD REGULATION[mV]	13.2max	20max	48max	60max	13.2max	20max	48max	60max
	RIPPLE[mVp-p] *3	-20 to +60℃	75max	75max	100max	100max	75max	75max	100max
		-40 to -20℃	100max	100max	120max	120max	100max	100max	120max
	RIPPLE NOISE[mVp-p] *3	-20 to +60℃	75max	75max	100max	100max	75max	75max	100max
		-40 to -20℃	150max	150max	150max	150max	150max	150max	150max
	TEMPERATURE REGULATION[mV]	-20 to +60℃	50max	50max	150max	180max	50max	50max	150max
		-40 to +60℃	80max	80max	240max	290max	80max	80max	240max
PROTECTION CIRCUIT AND OTHERS	DRIFT[mV] *4	20max	20max	48max	60max	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	3.296 - 3.404	4.975 - 5.137	11.857 - 12.243	14.839 - 15.321
	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically							
PROTECTION CIRCUIT AND OTHERS	OVERVOLTAGE PROTECTION	Work over 115 to 140% of rating							
	REMOTE ON/OFF	Provided (Negative logic L:ON, H:OFF)							

MODEL	MGFS40483R3	MGFS404805	MGFS404812	MGFS404815
MAX OUTPUT WATTAGE[W]	33	40	40.8	40.5
DC OUTPUT	VOLTAGE[V] *1	3.3	5	12
	CURRENT[A]	10	8	3.4

SPECIFICATIONS

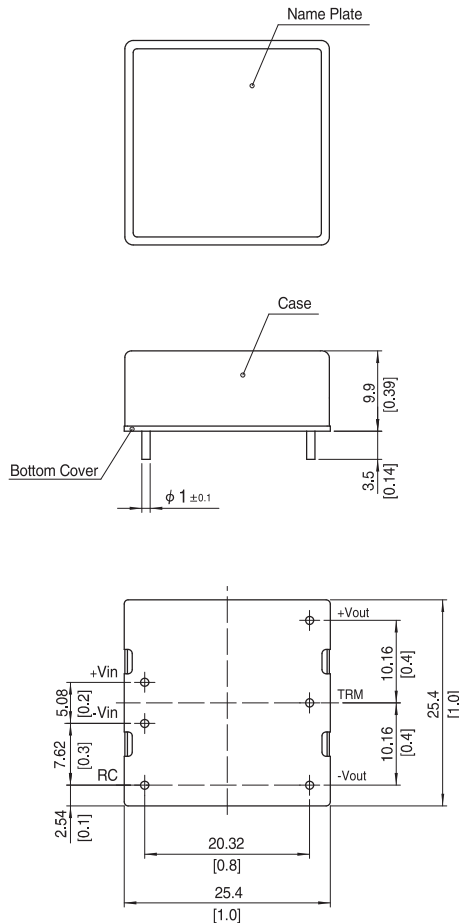
	MODEL	MGFS40483R3	MGFS404805	MGFS404812	MGFS404815
INPUT	VOLTAGE[V]	DC18 - 76 (Surge Voltage 100V, 100ms max)			
	CURRENT[A] *2	0.77typ	0.92typ	0.92typ	0.92typ
	EFFICIENCY[%] *2	89typ	91typ	92typ	92typ
OUTPUT	VOLTAGE[V]	3.3	5	12	15
	CURRENT[A]	10	8	3.4	2.7
	LINE REGULATION[mV]	13.2max	20max	48max	60max
	LOAD REGULATION[mV]	13.2max	20max	48max	60max
	RIPPLE[mVp-p] *3	-20 to +60℃	75max	75max	100max
		-40 to -20℃	100max	100max	120max
	RIPPLE NOISE[mVp-p] *3	-20 to +60℃	75max	75max	100max
		-40 to -20℃	150max	150max	150max
	TEMPERATURE REGULATION[mV]	-20 to +60℃	50max	50max	180max
		-40 to +60℃	80max	80max	290max
PROTECTION CIRCUIT AND OTHERS	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
	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically			
PROTECTION CIRCUIT AND OTHERS	OVERVOLTAGE PROTECTION	Work over 115 to 140% of rating			
	REMOTE ON/OFF	Provided (Negative logic L:ON, H:OFF)			

GENERAL SPECIFICATIONS

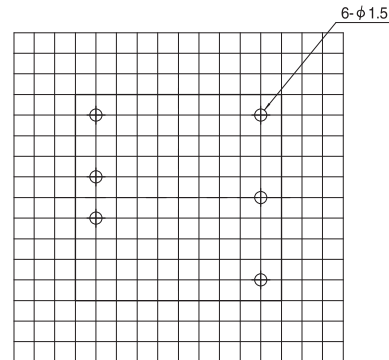
ISOLATION	INPUT-OUTPUT	DC1,500V 1minute, Cutoff current = 10mA, DC500V 1,000M Ω min (20 $\pm$ 15 $^{\circ}$ C)
	INPUT-CASE	DC1,000V 1minute, Cutoff current = 10mA, DC500V 1,000M Ω min (20 $\pm$ 15 $^{\circ}$ C)
	OUTPUT-CASE	DC1,000V 1minute, Cutoff current = 10mA, DC500V 1,000M Ω min (20 $\pm$ 15 $^{\circ}$ C)
ENVIRONMENT	OPERATING TEMP., HUMID. AND ALTITUDE	-40 to +85 $^{\circ}$ C, 20 to 95%RH (Non condensing) (Required Derating), 3,000m (10,000feet) max
	STORAGE TEMP., HUMID. AND ALTITUDE	-40 to +100 $^{\circ}$ 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 25.4mm (W X H X D) / 30g max
	COOLING METHOD	Convection/Forced air

- *1 MGF40xx12/MGF40xx15 is available as single output +24V/+30V
- *2 Rated input voltage (DC5V, DC24V, DC48V) $I_o=100\%$
- *3 Ripple and Ripple Noise is measured by using test board with ceramic capacitor 22 μ F 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 $^{\circ}$ C
- *5 Rated input voltage (DC5V, DC24V, DC48V), rated output wattage, ambient temperature at 25 $^{\circ}$ 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 [± 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 30g max