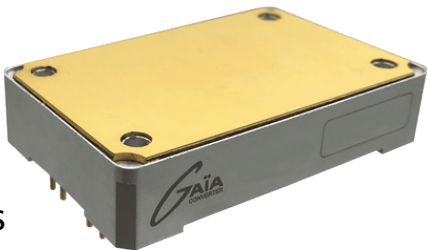




MGDM-250-O Series

Quarter brick, 250W, 16V-80V input isolated DC/DC converters

December 2024



INPUT SPECIFICATIONS

- O range : 16V – 80V
- UVLO turn-on: 15.6V (typ)
- UVLO turn-off: 13.6V (typ)

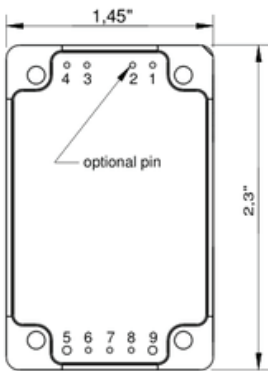
OUTPUT SPECIFICATIONS

- Single output
- Set point accuracy : +/- 2%
- Line regulation : +/- 0.5%
- Load regulation : +/- 0.5%
- Thermal regulation : +/- 1.0%
- Output ripple voltage : 2,5%
- Efficiency up to : 90%

CASE DIMENSIONS

- Quarter Brick format
- 2.3" x 1.45" x 0.5" (57,91 x 35,6 x 12,7 mm)
- Four fixing holes 0.122" (3,1mm)
- ROHS

PINS



Pin dimensions :
5, 9 : $\varnothing$ 0,059"
1, 2, 3, 4, 6, 7, 8 : $\varnothing$ 0,039"



Metallic case.
Pin plating : Gold flash

Pin	Function
1	-Input (Gi)
2	Synchro (Sync)
3	On/Off
4	+Input (Vi)
5	+Output (Vo)
6	Sense+ (S+)
7	Trim
8	Sense- (S-)
9	-Output (Go)

Pin 2 = option Synchronization (/F)

GENEREAL SPECIFICATIONS

Part Nb	Input voltage range permanent (transient)	Nominal output voltage	Nominal output current
MGDS-250-O-C MGDS-250-O-E MGDS-250-O-F MGDS-250-O-I	O: 16V to 75V(80)	5Vdc 12Vdc 15Vdc 24Vdc	50A 20.8A 16.6A 10.4A

- Wide temperature range : -40°C / +105°C case @Full Load
- Option available /T (-55°C), /S (screening)
- Insulation test voltage primary / secondary : 1500Vdc / 1 min
- 330 kHz fixed switching frequency
- 270-330 kHz switching frequency synchronization range
- Input Undervoltage Lockout (UVLO)
- On-Off function
- Output regulation no load to full load
- Output voltage trim range 80% to 110% of nominal
- Output overvoltage protection (OVP limiter 120%)
- Output current protection(Hiccup mode)
- Auto restart short circuit protection
- OTP (Over Temperature Protection)
- Synchronization pin for multi-modules architectures (option)

APPLICATIONS

Dedicated to Avionic DO160, Mil-STD 704, ABD100, Ground borne Mil-STD 1275.



Note that technical product specifications may be modified as presented on the datasheet - V1 - edit 12.03.24