SGS-THOMSON MICROELECTRONICS

GS5T24-5D15

5W TRIPLE OUTPUT DC-DC CONVERTER

Type	V_i	V_o	I_o
GS5T24-5D15	17,5 to 30	+ 5 V	200 mA
		+ 15 V	125 mA
		- 15 V	– 125 mA

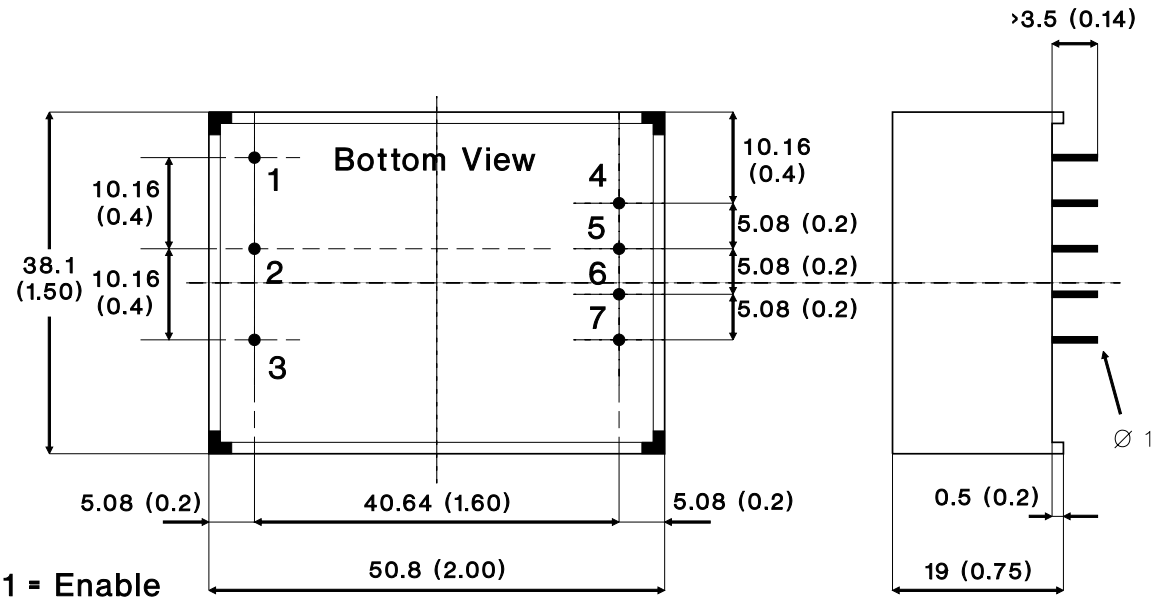
DESCRIPTION

The GS5T24-5D15 is a 5W DC-DC converter designed to provide three isolated outputs: 5V/200mA and a dual ±15V/±125mA.
The module operates from a 24V input source and offers 2500V_{DC} isolation voltage. A high level TTL/CMOS compatible input will enable the unit; a low input will inhibit it.

ELECTRICAL CHARACTERISTICS ($T_{amb.}$= 25° C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V_i	Input Voltage	V_{o1} = 5V I_{o1} = 0 to 200mA V_{o2} = 15V I_{o2} = 0 to 125mA V_{o3} = – 15V I_{o3} = 0 to – 125mA	17.5	24.0	30.0	V
I_{ir}	Input Reflected Current	V_i = 17.5 to 30V Full Load on All Outputs			75	mApp
V_{o1}	Output Voltage 1	V_i = 17.5 to 30V I_{o1} = 0 to 200mA	4.75	5.00	5.25	V
V_{o2}	Output Voltage 2	V_i = 17.5 to 30V I_{o2} = 0 to 125mA	14.25	15.00	15.75	V
V_{o3}	Output Voltage 3	V_i = 17.5 to 30V I_{o3} = 0 to – 125mA	– 14.25	– 15.00	– 15.75	V
V_{or1}	Output Ripple Voltage 1	V_i = 24V Full Load on All Outputs			30	mVpp
V_{or2}	Output Ripple Voltage 2	V_i = 24V Full Load on All Outputs			90	mVpp
V_{or3}	Output Ripple Voltage 3	V_i = 24V Full Load on All Outputs			90	mVpp
I_{o1}	Output Current 1	V_i = 17.5 to 30V V_{o1} = 5V	0		200	mA
I_{o2}	Output Current 2	V_i = 17.5 to 30V I_{o3} = 0 to 125mA V_{o2} = 15V	0		125	mA
I_{o3}	Output Current 3	V_i = 17.5 to 30V I_{o2} = 0 to – 125mA V_{o3} = – 15V	0		125	mA
V_{is}	Isolation Voltage		2500			V_{DC}
f_s	Switching Frequency			120		kHz
η	Efficiency	V_i = 24V Full Load on All Outputs	65	70		%
T_{op}	Operating Ambient Temperature Range	Still air	0		+40	°C
T_{op}	Operating Ambient Temperature Range	Forced ventilation, air speed = 100 LFM	0		+60	°C
T_{stg}	Storage Temperature Range		– 20		+85	°C

CONNECTION DIAGRAM AND MECHANICAL DATA



1 = Enable
2 = Vin -
3 = Vin +
4 = Vout -15V
5 = Vout +15V
6 = Out Common Ground
7 = Vout +5V

Package E. Dimensions in mm (inches)