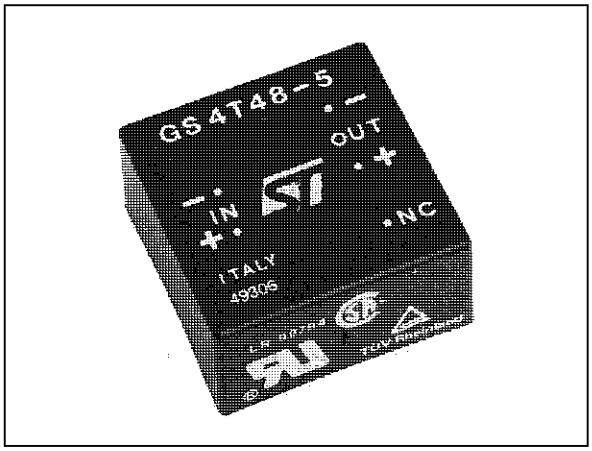
SGS-THOMSON MICROELECTRONICS

GS4T48-5

4 W DC-DC CONVERTER

Type	V_i	V_o	I_o
GS4T48-5	38 to 60 V	5 V	800 mA



DESCRIPTION

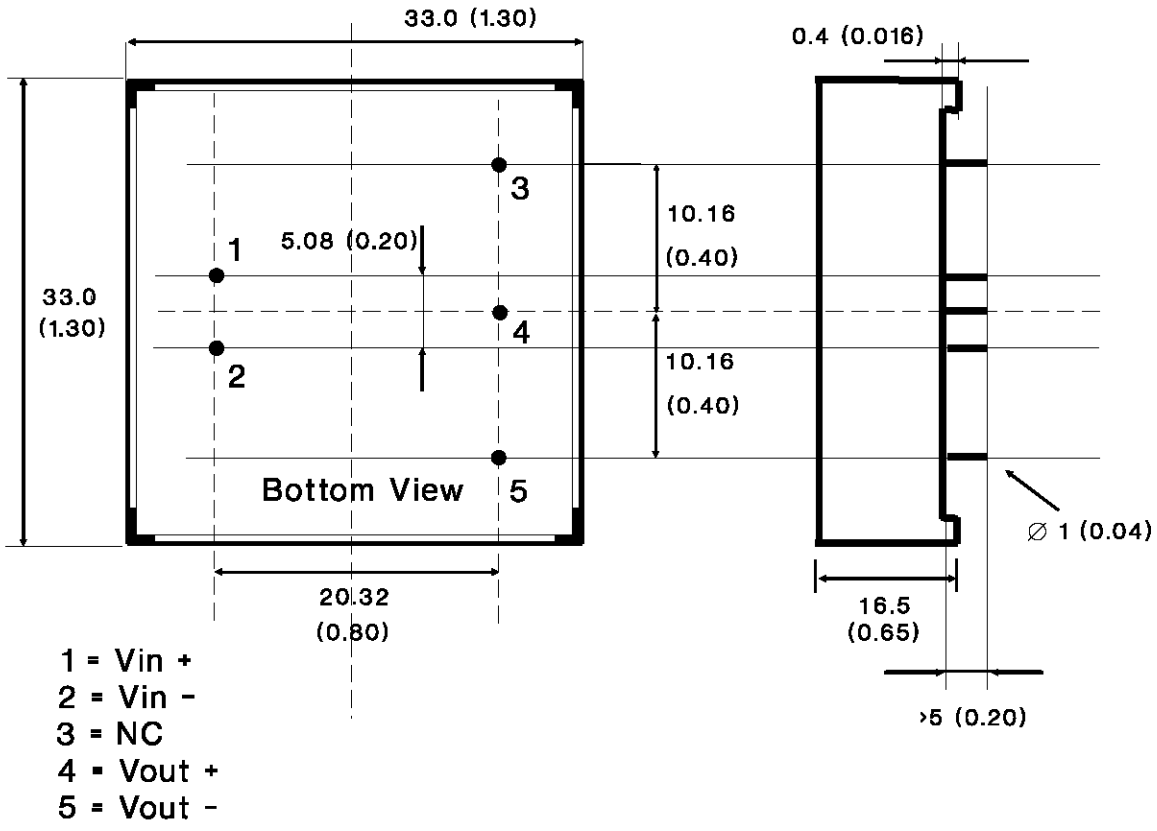
The GS4T48-5 is a 4W DC-DC converter designed to provide a 5V/800mA isolated power source.

The module features a wide input voltage range (38 to 60V), low reflected input current and continuous short-circuit protection. It is certified by UL, CSA (level 3) and TUV as having SELV output when provided with a SELV input.

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

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V_i	Input Voltage	V_o = 5V I_o = 50 to 800mA	38	48	60	V
I_i	Input Current	V_i = 38 to 60V I_o = 800mA			140	mA
I_{ir}	Input Reflected Current	V_i = 48V V_o = 5V I_o = 800mA		20	30	mApp
V_o	Output Voltage	V_i = 38 to 60V I_o = 50 to 800mA	4.8	5	5.2	V
V_{or}	Output Ripple Voltage	V_i = 48V I_o = 800mA BW = 5Hz to 20MHz		30	50	mVpp
δV_{OL}	Line Regulation	V_i = 38 to 60V I_o = 800mA		1	2	mV/V
δV_{OO}	Load Regulation	Vi = 48V I_o = 50 to 800mA		50	75	mV/A
I_o	Output Current	V_i = 38 to 60V V_o = 5V	50		800	mA
I_{osc}	Output Short-circuit Current	V_i = 48V			2	A
V_{is}	Isolation Voltage		500			V_{DC}
f_s	Switching Frequency	V_i = 38 to 60V I_o = 50 to 800mA	50		200	kHz
η	Efficiency	V_i = 48V I_o = 800mA	70	73		%
T_{op}	Operating Ambient Temperature Range	Still Air	0		+55	°C
T_{op}	Operating Ambient Temperature Range	Forced ventilation, air speed = 100 LFM	0		+65	°C
T_{stg}	Storage Temperature Range		– 40		+85	°C

CONNECTION DIAGRAM AND MECHANICAL DATA



Package C. Dimensions in mm (inches)

SAFETY APPROVALS

The converter is agency certified to the following safety requirements:

Agency	Requirements	File Number
UL	UL-STD-1950	E141284
CSA	CSA-STD-C22.2 No. 234	LR 99794-3
TUV	EN 60950 DIN VDE 0805	R 9172410

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