

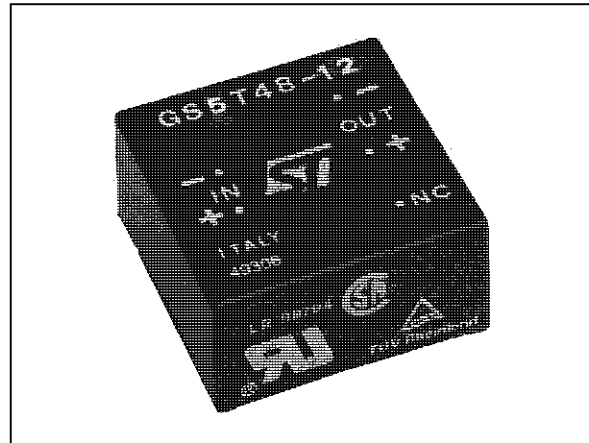
5 W DC-DC CONVERTER

Type	V _i	V _o	I _o
GS5T48-12	38 to 60 V	12 V	420 mA

DESCRIPTION

The GS5T48-12 is a 5W DC-DC converter designed to provide a 12V/420mA isolated power source.

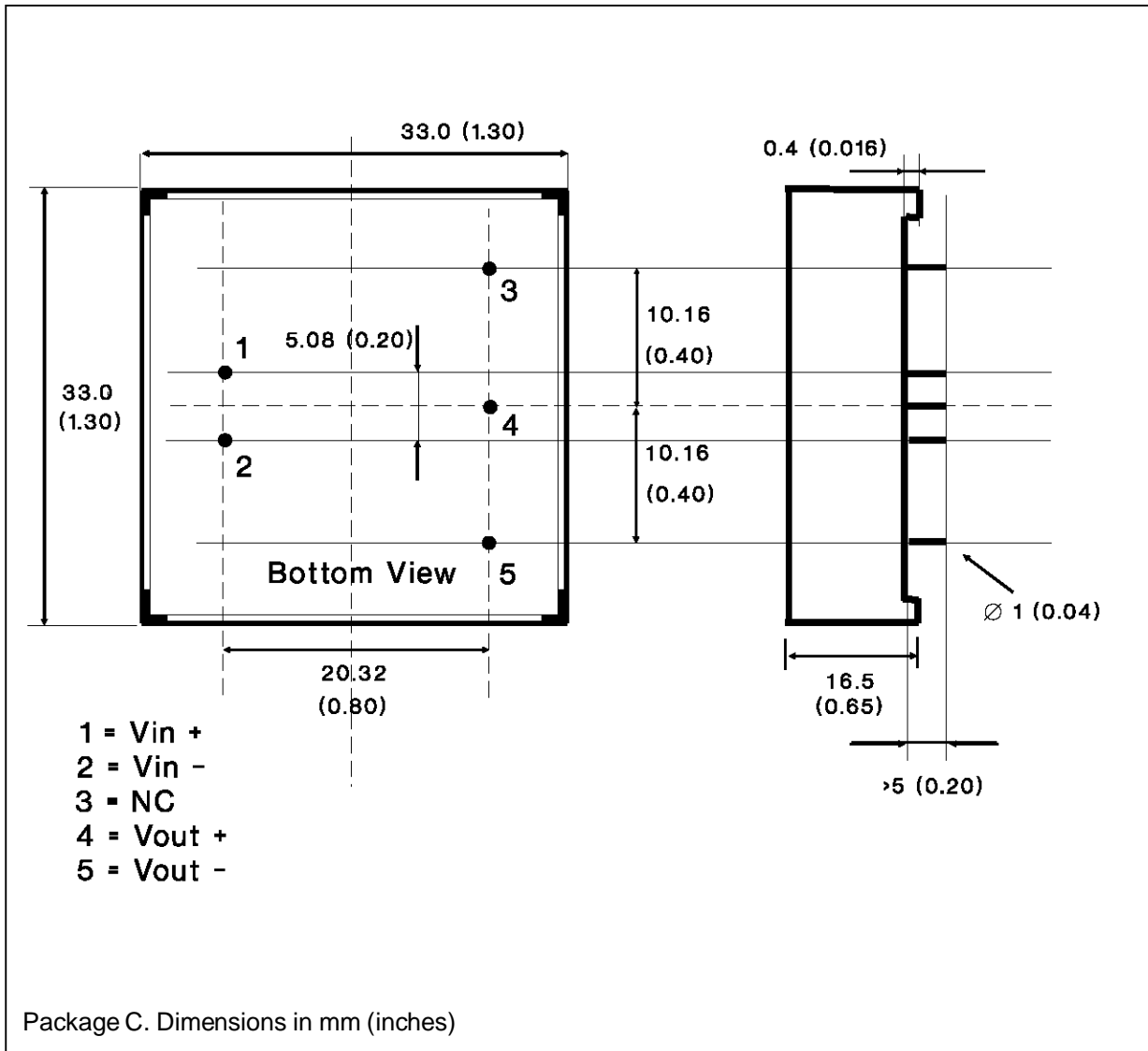
The module features a wide input voltage range (38 to 60V), low reflected input current and continuous short-circuit protection. It is certified by UL, CSA (level 3) and TUV as having SELV output when provided with a SELV input.



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

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V _i	Input Voltage	V _o = 12V I _o = 50 to 420mA	38	48	60	V
I _i	Input Current	V _i = 38 to 60V I _o = 420mA			500	mA
I _{ir}	Input Reflected Current	V _i = 48V V _o = 12V I _o = 420mA		25	40	mApp
V _o	Output Voltage	V _i = 38 to 60V I _o = 50 to 420mA	11.5	12	12.5	V
V _{or}	Output Ripple Voltage	V _i = 48V I _o = 420mA BW = 5Hz to 20MHz		50	100	mVpp
δVOL	Line Regulation	V _i = 38 to 60V I _o = 420mA		1	2	mV/V
δVOO	Load Regulation	V _i = 48V I _o = 50 to 420mA		100	150	mV/A
I _o	Output Current	V _i = 38 to 60V V _o = 12V	50		420	mA
I _{osc}	Output Short-circuit Current	V _i = 48V			1.8	A
V _{is}	Isolation Voltage		500			VDC
f _s	Switching Frequency	V _i = 38 to 60V I _o = 50 to 420mA	30		200	kHz
η	Efficiency	V _i = 48V I _o = 420mA	78	80		%
T _{op}	Operating Ambient Temperature Range	Still air	0		+60	°C
T _{op}	Operating Ambient Temperature Range	Forced ventilation, air speed = 100 LFM	0		+70	°C
T _{stg}	Storage Temperature Range		-40		+85	°C

CONNECTION DIAGRAM AND MECHANICAL DATA



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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