

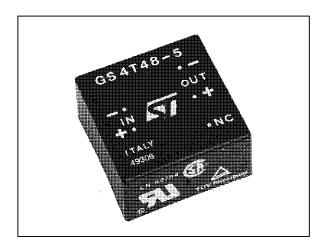
# 4 W DC-DC CONVERTER

Туре	V <sub>i</sub>	Vo	lo
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.

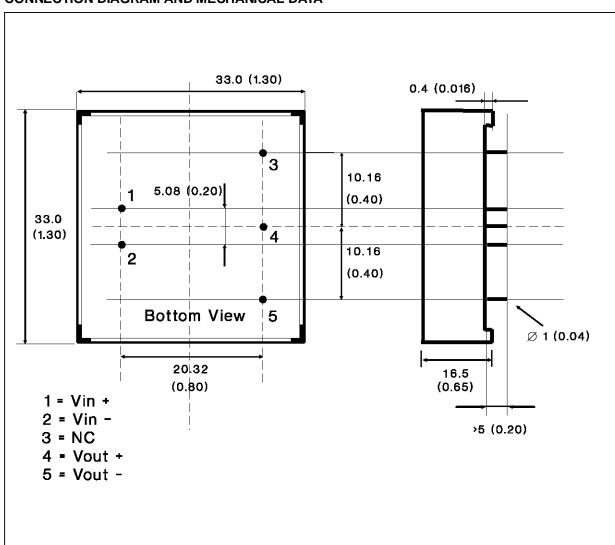
The module features a wide input voltage range (38 to 60V), low reflected input current and continuous short-circuit protection. It is certified by UL, CSA (level 3) and TUV as having SELV output when provided with a SELV input.



## **ELECTRICAL CHARACTERISTICS** (T<sub>amb.</sub>= 25° C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Тур	Max	Unit
Vi	Input Voltage	V <sub>O</sub> = 5V I <sub>O</sub> = 50 to 800mA	38	48	60	V
li	Input Current	Vi = 38 to 60V I <sub>O</sub> = 800mA			140	mA
lir	Input Reflected Current	Vi = 48V V <sub>O</sub> = 5V I <sub>O</sub> = 800mA		20	30	mApp
Vo	Output Voltage	V <sub>i</sub> = 38 to 60V I <sub>O</sub> = 50 to 800mA	4.8	5	5.2	V
Vor	Output Ripple Voltage	Vi = 48V I <sub>O</sub> = 800mA BW = 5Hz to 20MHz		30	50	mVpp
δVol	Line Regulation	$V_i = 38 \text{ to } 60V$ $I_0 = 800\text{mA}$		1	2	mV/V
δVοο	Load Regulation	Vi = 48V I <sub>O</sub> = 50 to 800mA		50	75	mV/A
lo	Output Current	$V_i = 38 \text{ to } 60V$ $V_0 = 5V$	50		800	mA
losc	Output Short-circuit Current	Vi = 48V			2	А
Vis	Isolation Voltage		500			VDC
f <sub>S</sub>	Switching Frequency	Vi = 38 to 60V I <sub>O</sub> = 50 to 800mA	50		200	kHz
η	Efficiency	Vi = 48V I <sub>O</sub> = 800mA	70	73		%
Top	Operating Ambient Temperature Range	Still Air	0		+55	°C
Тор	Operating Ambient Temperature Range	Forced ventilation, air speed = 100 LFM	0		+65	°C
T <sub>stg</sub>	Storage Temperature Range		- 40		+85	°C

June 1994 1/3



## **CONNECTION DIAGRAM AND MECHANICAL DATA**

## **SAFETY APPROVALS**

The converter is agency certified to the following safety requirements:

Package C. Dimensions in mm (inches)

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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