



# **5 W DC-DC CONVERTER**

Туре	V <sub>i</sub>	٧ <sub>o</sub>	lo
GS5T48-15	38 to 60 V	15 V	330 mA

## **DESCRIPTION**

The GS5T48-15 is a 5W DC-DC converter designed to provide a 15V/330mA isolated power source.

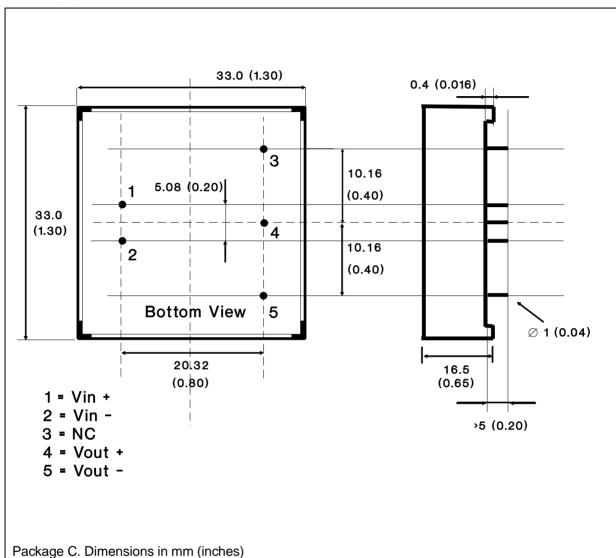
The module features a wide input voltage range (38 to 60V), low reflected input current and continuous short-circuit protection. It is certified by UL, CSA (level 3) and TUV as having SELV output when provided with a SELV input.



## ELECTRICAL CHARACTERISTICS (Tamb.= 25° C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Тур	Max	Unit
Vi	Input Voltage	V <sub>O</sub> = 15V I <sub>O</sub> = 50 to 330mA	38	48	60	V
li	Input Current	V <sub>i</sub> = 38 to 60V I <sub>o</sub> = 330mA			500	mA
lir	Input Reflected Current	Vi = 48V Vo = 15V Io = 330mA		25	40	mApp
Vo	Output Voltage	$V_i = 38 \text{ to } 60V$ $I_0 = 50 \text{ to } 330\text{mA}$	14.5	15	15.5	V
Vor	Output Ripple Voltage	V <sub>i</sub> = 48V I <sub>O</sub> = 330mA BW = 5Hz to 20MHz		50	100	mVpp
δV <sub>OL</sub>	Line Regulation	$V_i = 38 \text{ to } 60V$ $I_0 = 330\text{mA}$		1	2	mV/V
δVοο	Load Regulation	$V_i = 48V$ $I_0 = 50 \text{ to } 330\text{mA}$		100	150	mV/A
lo	Output Current	$V_i = 38 \text{ to } 60V$ $V_0 = 15V$	50		330	mA
losc	Output Short-circuit Current	Vi = 48V			1.8	А
Vis	Isolation Voltage		500			V <sub>DC</sub>
f <sub>S</sub>	Switching Frequency	$V_i = 38 \text{ to } 60V$ $I_0 = 50 \text{ to } 330\text{mA}$	30		200	kHz
η	Efficiency	$V_i = 48V$ $I_0 = 330 \text{mA}$	80	82		%
Тор	Operating Ambient Temperature Range	Still air	0		+60	°C
Тор	Operating Ambient Temperature Range	Forced ventilation, air speed = 100 LFM	0		+70	°C
T <sub>stg</sub>	Storage Temperature Range		- 40		+85	°C

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### **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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