



GS5T48-5

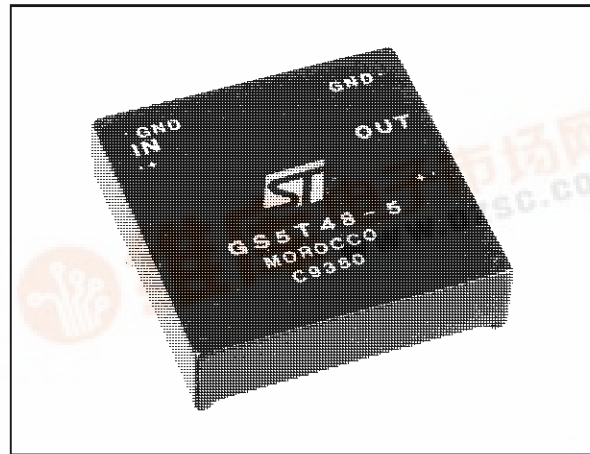
5 W DC-DC CONVERTER

Type	V_i	V_o	I_o
GS5T48-5	40 to 60 V	5 V	1 A

DESCRIPTION

The GS5T48-5 is a 5W DC-DC converter designed to provide a 5V/1A isolated power source in a metal package.

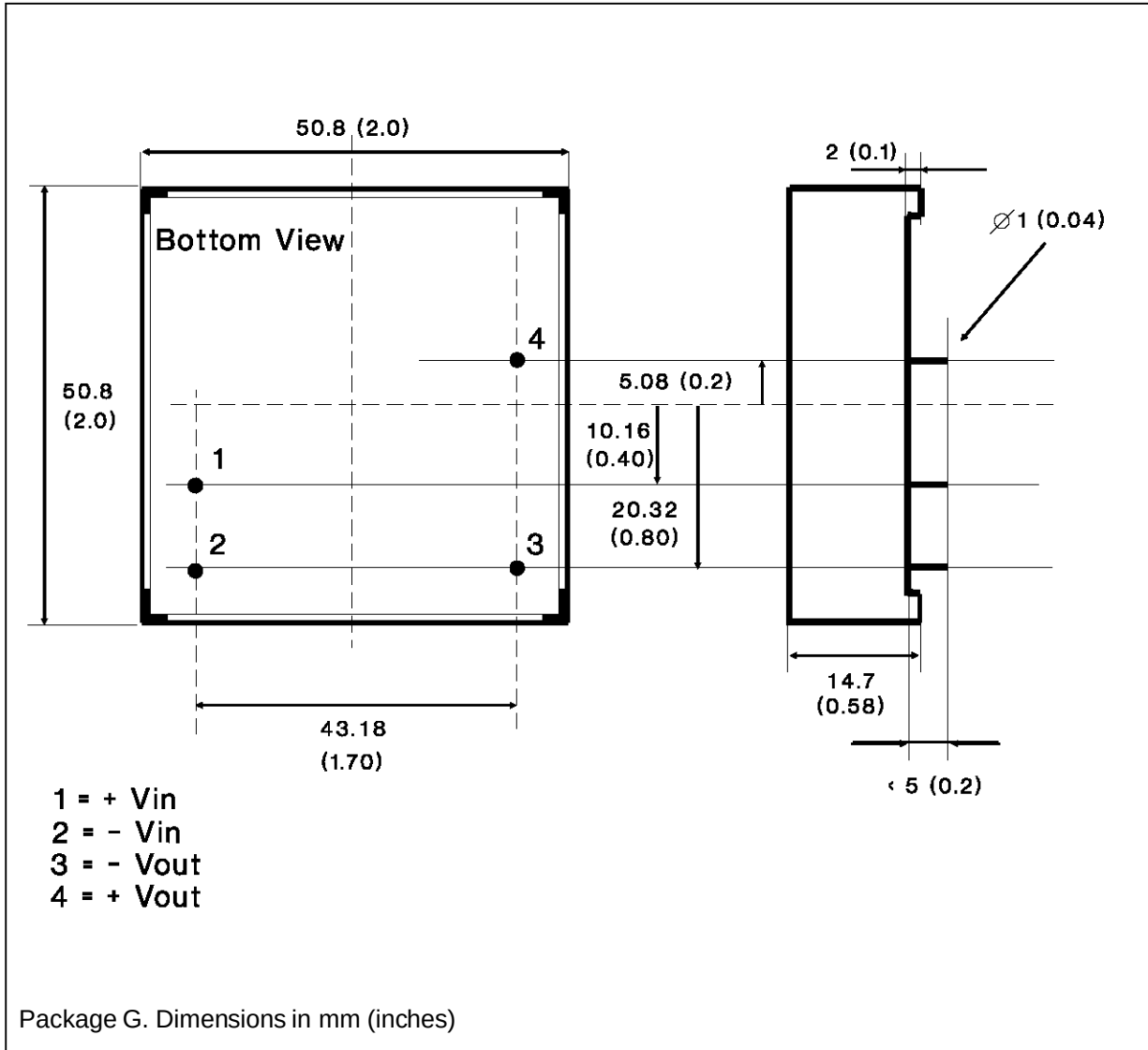
The module features a wide input voltage range (40 to 60V), low reflected input current and continuous short-circuit protection.



ELECTRICAL CHARACTERISTICS ($T_{amb.} = 25^\circ \text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V_i	Input Voltage	$V_o = 5\text{V}$ $I_o = 50$ to 1000mA	40	48	60	V
I_i	Input Current	$V_i = 40$ to 60V $I_o = 1000\text{mA}$			115	mA
I_{ir}	Input Reflected Current	$V_i = 48\text{V}$ $V_o = 5\text{V}$ $I_o = 1000\text{mA}$		10	15	mApp
V_o	Output Voltage	$V_i = 40$ to 60V $I_o = 50$ to 1000mA	4.85	5.00	5.15	V
V_{or}	Output Ripple Voltage	$V_i = 48\text{V}$ $I_o = 1000\text{mA}$ BW = 5Hz to 20MHz		20	35	mVpp
I_o	Output Current	$V_i = 40$ to 60V $V_o = 5\text{V}$	50		1000	mA
I_{osc}	Output Short-circuit Current	$V_i = 48\text{V}$			2.3	A
V_{is}	Isolation Voltage		500			V _{DC}
f_s	Switching Frequency	$V_i = 40$ to 60V $I_o = 50$ to 1000mA		100		kHz
η	Efficiency	$V_i = 48\text{V}$ $I_o = 1000\text{mA}$	70	72		%
T_{op}	Operating Case Temperature Range		- 25		+85	$^\circ\text{C}$
T_{stg}	Storage Temperature Range		- 40		+105	$^\circ\text{C}$

CONNECTION DIAGRAM AND MECHANICAL DATA



Information furnished is believed to be accurate and reliable. However, SGS-THOMSON Microelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of SGS-THOMSON Microelectronics. Specification mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. SGS-THOMSON Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of SGS-THOMSON Microelectronics.

© 1994 SGS-THOMSON Microelectronics – All Rights Reserved

SGS-THOMSON Microelectronics GROUP OF COMPANIES
 Australia - Brazil - China - France - Germany - Hong Kong - Italy - Japan - Korea - Malaysia - Malta - Morocco - The Netherlands -
 Singapore - Spain - Sweden - Switzerland - Taiwan - Thailand - United Kingdom - U.S.A.