



## 2W DUAL OUTPUT DC-DC CONVERTER

Туре	V <sub>in</sub>	V <sub>out</sub>	l <sub>out</sub>
GS2T48-D12	38 to 60 V	±12 V	±100mA

## **DESCRIPTION**

The GS2T48-D12 is a 2.4W DC-DC converter designed to provide an isolated +12V/100mA and -12V/100mA power source.

The module operates from wide input range (38 to 60V) and offers low reflected input current and continuous short-circuit protection.

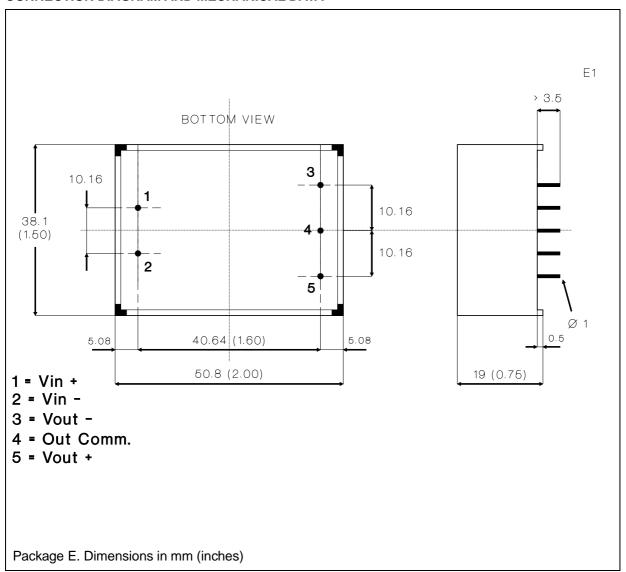


## **ELECTRICAL CHARACTERISTICS** (T<sub>amb.</sub>= 25° C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Тур	Max	Unit
Vi	Input Voltage	V <sub>01</sub> = +12V	38	48	60	V
lir	Input Reflected Current	V <sub>i</sub> = 38 to 60V Full Load		3	5	mApp
Vo1	Output Voltage 1	Vi = 38 to 60V lo1 = 0 to 100mA lo2 = 0 to -100mA	11.2	12.0	12.8	V
V <sub>0</sub> 2	Output Voltage 2	V <sub>i</sub> = 38 to 60V I <sub>0</sub> 2 = 0 to -100mA	-11.2	-12.0	-12.8	V
Vor1	Output Ripple Voltage 1	Vi = 38 to 60  lo1 = 100mA		30	50	mVrms
Vor2	Output Ripple Voltage 2	Vi = 38 to 60 lo2 = -100mA		30	50	mVrms
l <sub>01</sub>	Output Current 1	V <sub>i</sub> = 38 to 60V V <sub>O1</sub> = 12V	0		100	mA
lo2	Output Current 2	$V_i = 38 \text{ to } 60V$ $V_{02} = -12V$	0		-100	mA
Vis	Isolation Voltage		500			Vdc
fs	Switching Frequency	Vi = 48V	50	100	150	kHz
η	Efficiency	V <sub>i</sub> = 48V Full Load	70	73		%
Top	Operating Ambient Temperature Range		0		+70	°C
Tstg	Storage Temperature Range		-40		+85	°C

December 1993 1/2

## **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 - France - Germany - Hong Kong - Italy - Japan - Korea - Malaysia - Malta - Morocco - The Netherlands - Singapore - Spain - Sweden - Switzerland - Taiwan - Thailand - United Kingdom - U.S.A.

