

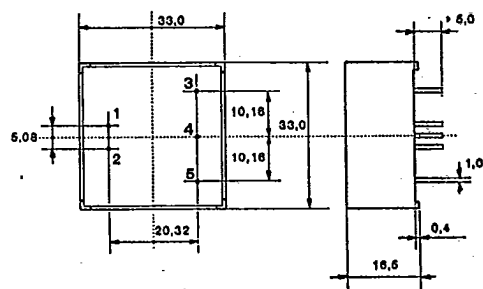
DC-DC CONVERTER**DESCRIPTION**

The GS-4148-12 is a 3.6W DC-DC converter designed to provide an isolated 12V/200mA power source for telecommunications.

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

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

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V_i	Input Voltage	$I_o = 50$ to 300mA	40	48	60	V
I_i	Input Current	$V_i = 48\text{V}$ $I_o = 300\text{mA}$			95	mA
V_o	Output Voltage	$V_i = 40$ to 60V $I_o = 50$ to 300mA	11.5	12.0	12.5	V
I_o	Output Current	$V_i = 40$ to 60V	50		300	mA
η	Efficiency	$V_i = 48\text{V}$ $I_o = 300\text{mA}$	80			%
V_{or}	Output Ripple Voltage	$V_i = 40$ to 60V $I_o = 300\text{mA}$			30	mVpp
I_{ir}	Input Reflected Current	$V_i = 48\text{V}$ $I_o = 300\text{mA}$			10	mApp
I_{isc}	Input Short Circuit Current				65	mA
I_{osc}	Output Short Circuit Current	$V_i = 48\text{V}$			1.3	A
V_{is}	Isolation Voltage		500			Vdc
f_{op}	Operating Frequency		50		200	kHz
T_{stg}	Storage Temperature		-40		+85	$^\circ\text{C}$
T_{op}	Operating Temperature		0		+70	$^\circ\text{C}$

CONNECTION DIAGRAM AND MECHANICAL DATA

Dimensions in mm

bottom view

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SGS-THOMSON
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1/1

43