

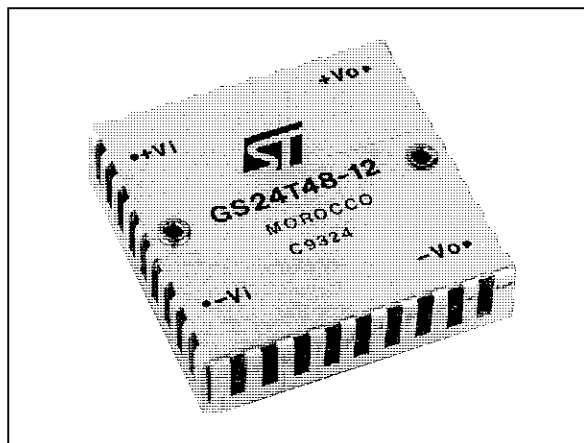
24 W DC-DC CONVERTER

Type	V _{in}	V _{out}	I _{out}
GS24T48-12	36 to 72 V	12 V	2 A

DESCRIPTION

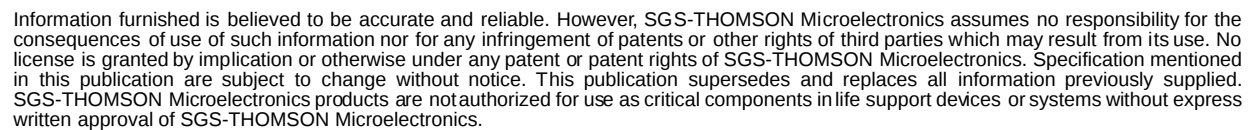
The GS24T48-12 is a 24W DC-DC converter designed to provide a 12V/2A isolated power source.

The module features a wide input voltage range (36 to 72V), low reflected input current and short-circuit protection.



ELECTRICAL CHARACTERISTICS (T_{amb.} = 25° C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V _i	Input Voltage	V _o = 12V I _o = 0.1 to 2A	36	48	72	V
I _i	Input Current	V _i = 48V V _o = 12V I _o = 2A		0.58	0.60	A
I _{ir}	Input Reflected Current	V _i = 48V V _o = 12V I _o = 2A		90	120	mApp
I _{iinr}	Input Inrush Current	V _i = 48V V _o = 12V I _o = 2A		18	22	Ap
I _{isc}	Input Shortcircuit Current	V _i = 48V V _o = 0V		100	150	mA
V _o	Output Voltage	V _i = 36 to 72V I _o = 0.1 to 2A	11.4	12	12.6	V
V _{or}	Output Ripple Voltage	V _i = 48V V _o = 12V I _o = 2A		30	60	mVpp
V _{on}	Output Noise Voltage	V _i = 48V V _o = 12V I _o = 2A BW = 100MHz			500	mVpp
δV _o	Line Regulation	V _i = 36 to 72V I _o = 2A		20	30	mV
δV _o	Load Regulation	V _i = 48V I _o = 0.1 to 2A		20	30	mV
I _o	Output Current	V _i = 36 to 72V V _o = 12V	0.1		2	A
I _{osc}	Output Short-circuit Current	V _i = 48V V _o = 0V		1.0	1.5	A
V _{is}	Isolation Voltage		500			Vdc
f _s	Switching Frequency	V _i = 36 to 72V I _o = 0.1 to 2A		450		kHz
η	Efficiency	V _i = 48V V _o = 12V I _o = 2A	84	86		%
R _{th}	Thermal Resistance	Case-to-Ambient		13		°C/W
T _{cop}	Operating Case Temperature Range		0		+85	°C
T _{stg}	Storage Temperature Range		-20		+105	°C



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