

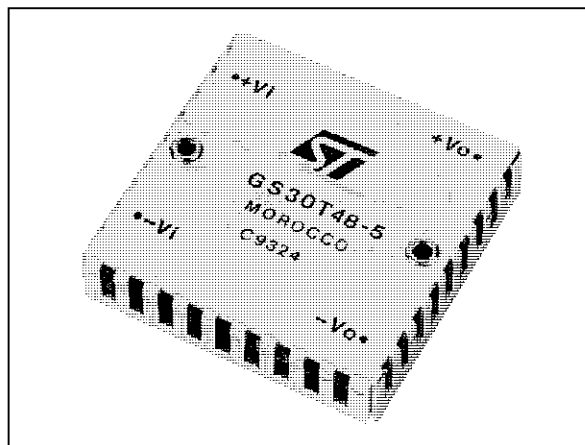
30 W DC-DC CONVERTER

Type	V _{in}	V _{out}	I _{out}
GS30T48-5	36 to 72 V	5 V	6 A

DESCRIPTION

The GS30T48-5 is a 30W DC-DC converter designed to provide a 5V/6A 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 = 5V I _O = 0.05 to 6A	36	48	72	V
I _i	Input Current	V _i = 48V V _O = 5V I _O = 6A		0.79	0.82	A
I _{ir}	Input Reflected Current	V _i = 48V V _O = 5V I _O = 6A		250	300	mApp
I _{iinr}	Input Inrush Current	V _i = 48V V _O = 5V I _O = 6A		18	22	Ap
I _{isc}	Input Shortcircuit Current	V _i = 48V V _O = 0V		45	70	mA
V _O	Output Voltage	V _i = 36 to 72V I _O = 0.05 to 6A	4.75	5.00	5.25	V
V _{or}	Output Ripple Voltage	V _i = 48V V _O = 5V I _O = 6A		150	200	mVpp
δV _O	Line Regulation	V _i = 36 to 72V I _O = 6A		2	10	mV
δV _O	Load Regulation	V _i = 48V I _O = 0.05 to 6A		2	10	mV
I _O	Output Current	V _i = 36 to 72V V _O = 5V	0.05		6	A
I _{osc}	Output Short-circuit Current	V _i = 48V V _O = 0V		0.85	1.1	A
V _{is}	Isolation Voltage		500			Vdc
f _s	Switching Frequency	V _i = 36 to 72V I _O = 0.05 to 6A		450		kHz
η	Efficiency	V _i = 48V V _O = 5V I _O = 6A	77	80		%
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

