

GS30T48-5

30 W DC-DC CONVERTER

Туре	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 currend and short-circuit protection.



ELECTRICAL CHARACTERISTICS (Tamb.= 25° C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Тур	Max	Unit
Symbol	i arameter		IVIIII	тур	Max	
Vi	Input Voltage	$V_0 = 5V$ $I_0 = 0.05$ to 6A	36	48	72	V
lj	Input Current	$V_i = 48V$ $V_0 = 5V$ $I_0 = 6A$		0.79	0.82	А
lir	Input Reflected Current	$V_i = 48V$ $V_0 = 5V$ $I_0 = 6A$		250	300	mApp
liinr	Input Inrush Current	V _j = 48V V ₀ = 5V I ₀ = 6A		18	22	Ар
lisc	Input Shortcircuit Current	$V_i = 48V$ $V_0 = 0V$		45	70	mA
Vo	Output Voltage	V_{i} = 36 to 72V I_{0} = 0.05 to 6A	4.75	5.00	5.25	V
Vor	Output Ripple Voltage	V _j = 48V Vo = 5V I ₀ = 6A		150	200	mVpp
δVo	Line Regulation	Vi= 36 to 72V Io= 6A		2	10	mV
δVo	Load Regulation	V _j = 48V I ₀ = 0.05 to 6A		2	10	mV
lo	Output Current	Vi= 36 to 72V Vo = 5V	0.05		6	А
l _{osc}	Output Short-circuit Current	$V_i = 48V$ $V_0 = 0V$		0.85	1.1	A
Vis	Isolation Voltage		500			Vdc
fs	Switching Frequency	V _j = 36 to 72V I ₀ = 0.05 to 6A		450		kHz
η	Efficiency	$V_i = 48V$ $V_0 = 5V$ $I_0 = 6A$	77	80		%
Rth	Thermal Resistance	Case-to-Ambient		13		°C/W
Т _{сор}	Operating Case Temperature Range		0		+85	°C
Tstg	Storage Temperature Range		-20		+105	°C

CONNECTION DIAGRAM AND MECHANICAL DATA



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