

15W DC-DC CONVERTER

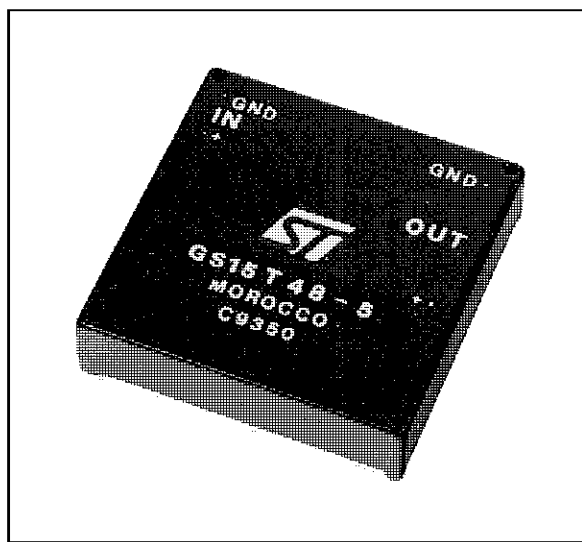
Type	V _{in}	V _{out}	I _{out}
GS15T48-5	40 to 60 V	5 V	3 A

DESCRIPTION

The GS15T48-5 is a 15W DC-DC converter designed to provide a 5V/3A isolated output from a 48V input in a metal package.

High frequency forward switching configuration ensures high efficiency (80% typ.); input filter minimizes reflected input current and continuous short-circuit protection is provided.

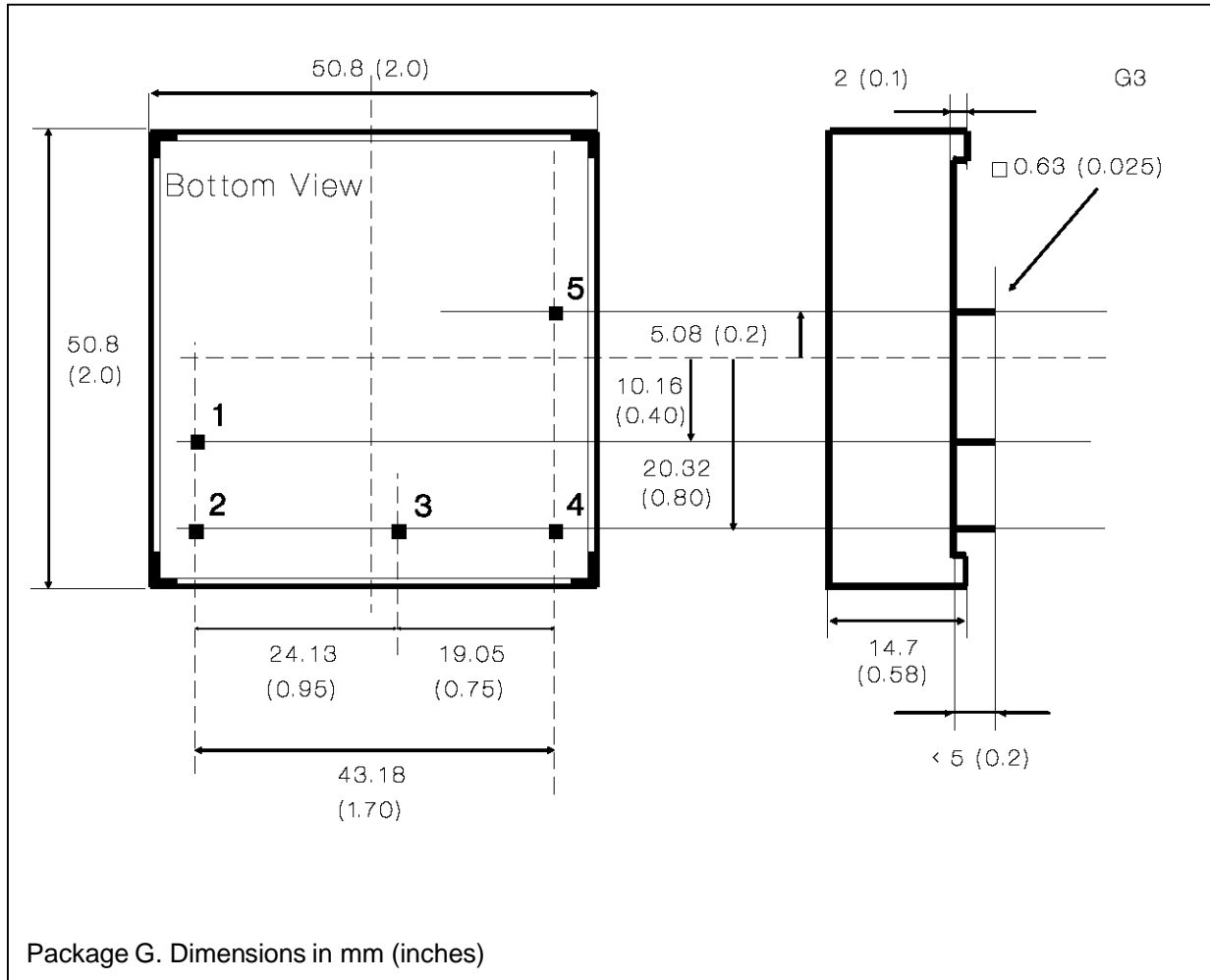
The integral heatsink allows a large power handling capability and it features also an effective shielding to minimize EMI.



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 to 3A	40	48	60	V
I _i	Input Current	V _i = 48V I _o = 3A		400		mA
I _{ir}	Input Reflected Current	V _i = 48V V _o = 5V I _o = 3A		50	80	mApp
I _{iq}	Input Quiescent Current	V _i = 48V V _o = 5V I _o = 0A		20		mA
V _o	Output Voltage	V _i = 40 to 60V I _o = 0 to 3A	4.75	5	5.25	V
ΔV _o	Line Regulation	V _i = 40 to 60V I _o = 3A		10	20	mV
ΔV _o	Load Regulation	V _i = 48V I _o = 0 to 3A		10	20	mV
V _{or}	Output Ripple Voltage	V _i = 48V I _o = 3A		20	50	mVpp
I _o	Output Current	V _i = 40 to 60V	0		3	A
I _{osc}	Output Short-circuit Current	V _i = 48V		5	6	A
V _{is}	Isolation Voltage		750			Vdc
f _s	Switching Frequency	V _i = 40 to 60V I _o = 0 to 3A		250		kHz
η	Efficiency	V _i = 48V I _o = 3A		80		%
R _{thc}	Thermal Resistance Case to Ambient	T _{amb} = 25°C V _i = 48V I _o = 3A		8		°C/W
T _{cmax}	Maximum Case Temperature				+85	°C
T _{stg}	Storage Temperature Range		-40		+105	°C

CONNECTION DIAGRAM AND MECHANICAL DATA



PIN DESCRIPTION

Pin	Function	Description
1	+ Input	DC input voltage (48V nom.)
2	- Input	Return for input voltage
3	Case	Case connection
4	- Output	Negative isolated output voltage
5	+ Output	Positive isolated output voltage

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