

Functional Description

The BD1002 unregulated 1W single DC/DC converter features 5V_{IN} and 5V_{OUT} in a SIP package with a minimum isolation voltage of 1000Vdc, 70% efficiency and an operating temperature range from -40°C to +85°C.

Electrical Specifications: Unregulated

INPUT SPECIFICATIONS

Measured at 25°C with the condition of V_{IN} = Nominal and Full Load. Specifications subject to change without notice.

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Input Voltage Range	V _{IN} Nominal ±10%		5		Vdc
Input Filter	Capacitor				

OUTPUT SPECIFICATIONS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Output Voltage			5		Vdc
Output Current			200		mA
Output Voltage Accuracy			±5		%
Ripple & Noise	@20MHz BW			100	mV _{PP}
Line Regulation	Minimum V _{IN} to maximum V _{IN}		1.2%		per 1% of V _{IN}
Load Regulation, 5V _{OUT}	10% FL to FL			15	%
Short Circuit Protection			1		sec

GENERAL SPECIFICATIONS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Efficiency @ FL			70		%
Isolation Voltage, Input to Output		1000			Vdc
Isolation Resistance			10		GΩ
Isolation Capacitance			75		pF

ENVIRONMENTAL SPECIFICATIONS

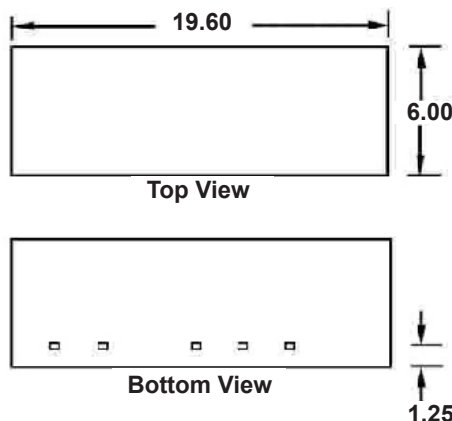
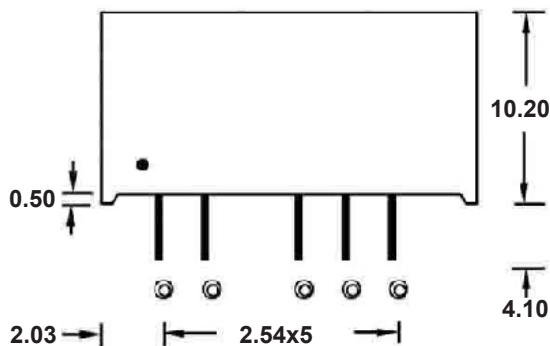
PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Operating Temperature Range	Ambient	-40		+85	°C
Storage Temperature Range		-55		+125	°C

PHYSICAL CHARACTERISTICS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Dimensions (L×W×H)	0.77×0.24×0.40 in. (19.60×6.00×10.20mm)				
Weight	0.08 oz. (2.2g)				

Mechanical Specifications

Note: Terminal -- 0.50×0.25 Flat Pin
UNIT: mm TOLERANCE: ±0.25mm



Pin	Function
1	+V _{IN}
2	-V _{IN} (GND)
4	No Connection
5	-V _{OUT}
6	+V _{OUT}