

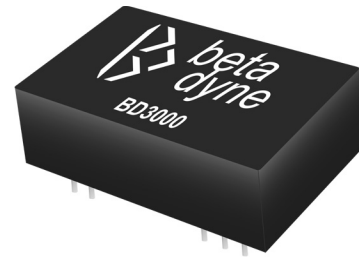


BD3000

3W DUAL DC/DC CONVERTER

Functional Description

The BD3000 is a 3W dual DC/DC converter that accepts $18\text{--}36V_{\text{IN}}$ and provides $\pm 12V_{\text{OUT}}$ in a 24-pin DIP package with a minimum isolation voltage of 2000Vdc, efficiency up to 84% and operating temperature range from -40°C to $+80^{\circ}\text{C}$.



Electrical Specifications: Regulated INPUT SPECIFICATIONS

NOTE: 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	2:1	18		36	Vdc
Input Filter	π				

OUTPUT SPECIFICATIONS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Output Voltage			± 12		Vdc
Output Current			± 125		mA
Output Voltage Accuracy			± 1		%
Ripple & Noise	@20MHz BW		50		mV _{pp}
Line Regulation	Minimum V_{IN} to maximum V_{IN}			± 0.2	%
Load Regulation	10% FL to FL			± 0.4	%
Short Circuit Protection	Continuous				

GENERAL SPECIFICATIONS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Efficiency @ FL				84	%
Isolation Voltage (1 min.), Input to Output		2000			Vdc
Isolation Resistance			1		G Ω
Isolation Capacitance			22		pF
Operating Frequency		85			kHz

ENVIRONMENTAL SPECIFICATIONS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Operating Temperature Range	Ambient	-40		$+80$	$^{\circ}\text{C}$
Storage Temperature Range		-50		$+125$	$^{\circ}\text{C}$
Case Temperature	@ $T_{\text{a}} = 25^{\circ}\text{C}$		40		$^{\circ}\text{C}$

PHYSICAL CHARACTERISTICS

PARAMETER	CONDITION / NOTE	MIN	TYP	MAX	UNIT
Dimensions, Plastic Case (L×W×H)	1.27×0.80×0.50 in. (32.20×20.32×12.70mm)				
Weight, Plastic Case	0.42 oz. (12g)				

Mechanical Specifications

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

