

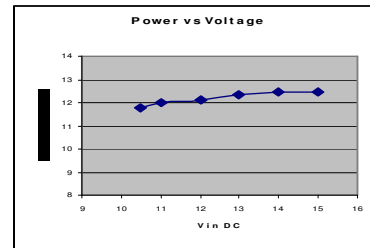
MED Electronics Low Voltage Fluorescents

BALLAST DATA SHEET

Part Numbers: **12VDC7WB thro 12VDC18WB**

Features

Battery Voltage DC Supply 10.5V to 14.7V.
Ballast for Low Wattage Lamps 7W to 18W.
HF operation, 25kHz.
Low loss, high efficiency better than $\eta = 85\%$
Reverse polarity and lamp missing protection.
Short circuit current limiting.
Input-output isolation 2500VAC
Good input power regulation (see fig 1) ----->



Absolute Maximum Ratings

Parameter	All Ballasts	Unit
Vin DC	16	V
Reverse voltage	16	V
Operating ambient temperature	50	°C

Recommended Operating Conditions

Parameter	Min	Max	Unit
Vin DC	10.5	14.7	V
Ta, free air temperature	-10	50	°C

Electrical Characteristics

Parameter	Test Condition	Ta	7W	9W	11W	13W	16W	18W
Iin Input Current	12VDC	25 °C	0.6A	0.77A	0.94A	1.11A	1.36A	1.5A
Io Output Current RMS	12VDC	25 °C	0.127A	0.15A	0.169A	0.185A	0.195A	0.198A
Operating power loss $\eta \geq 85\%$	12VDC	25 °C	1.05W	1.35W	1.65W	1.95W	2.4W	2.7W
Typical variation of input power for 11W Ballast versus Input Voltage (see Fig 1)	11W Lamp at Ta 25 °C	Pin	10.7W	11W	11.16W	11.44W	11.7W	11.94W
		Vin	10.5V	11V	12V	13V	15V	16V
fo Operating Frequency	12VDC	25 °C	All Ballasts operate between 23kHz and 26kHz					

Parameter	Test Condition	Ta	Value
Reverse polarity input surge current. Protected by self-resetting polymer fuse	12VDC	25 °C	50A peak decays rapidly to quiescent value
Reverse polarity quiescent current	12VDC	25 °C	0.1A
Short circuit load, input current	12VDC	25 °C	0.15A
Open circuit load, input current	12VDC	25 °C	0.25A