



**FEATURES:**

- Step Up LED Driver
- Wide (7:1) Input Voltage Range
- Remote Control Function
- 24 Pin DIP Package
- Constant Output Current
- High Efficiency
- PWM Dimming Function (10 – 90%)
- Non-Isolated



**Models**  
**Single output**

Model	Input Voltage (V)	Output Voltage (V)	Maximum Rated Current (mA)	Efficiency Max (%)
AMLB-1810IZ	3-18	5-38	100	90

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

**Input Specifications**

Parameters	Nominal	Typical	Maximum	Units
Voltage range	12	3-18	18	VDC
On/Off Control (Analog Control)	ON: Vr = DC Input Voltage			
Input voltage range (0-12Vdc) (Leave open if not used)	OFF:DC = 0V			
Dimming Control (Digital Control)	Max PWM Frequency (10%~90%) 200Hz			

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Current accuracy		±5		%
Short Circuit protection	Connect an external input fuse (1A/250)			
Output Open Protection	No Load			
Max load capacitance			100	µF

**General Specifications**

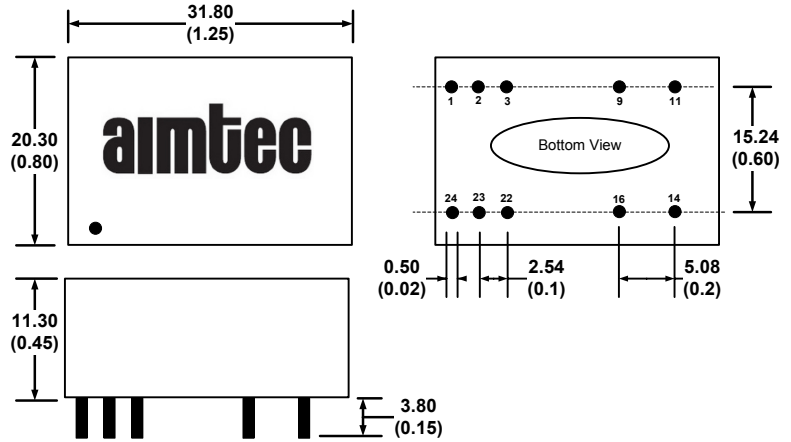
Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	1.2		MHz
Operating temperature		-40 to +85		°C
Storage temperature		-40 to +125		°C
Max Case temperature			100	°C
Cooling	Free Air Convection			
Humidity			95	% RH
Case material	Non-Conductive Black Plastic			
Potting material	Epoxy (Flammability UL94V-0)			
Weight		12		g
Dimensions (L x W x H)	1.25 × 0.80 × 0.45 inches / 31.80 × 20.30 × 11.30 mm			

**Pin Out Specifications**

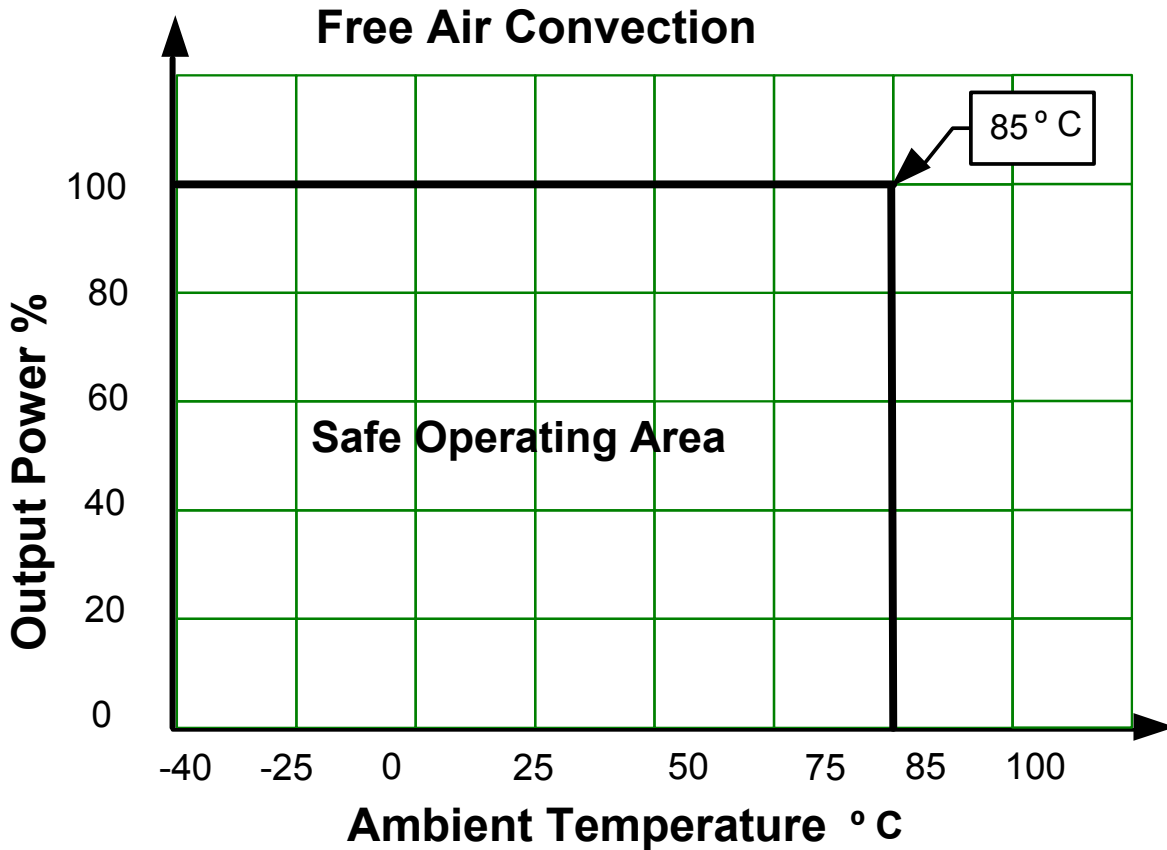
Pin	Single
1	Remote On/Off
2	-Vin
3	-Vin
9	NC
11	NC
14	LED +
16	LED -
22	+Vin
23	+Vin
24	DIM

NC: Not Connected

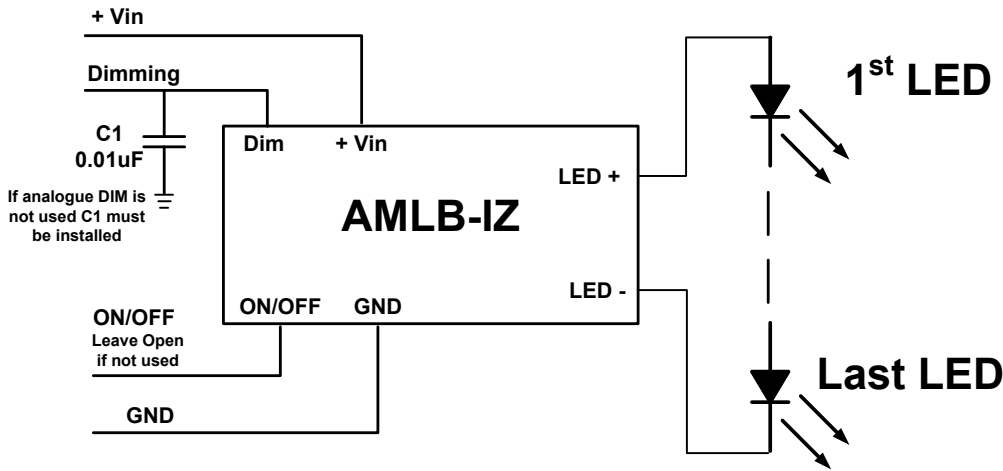
**Dimensions**



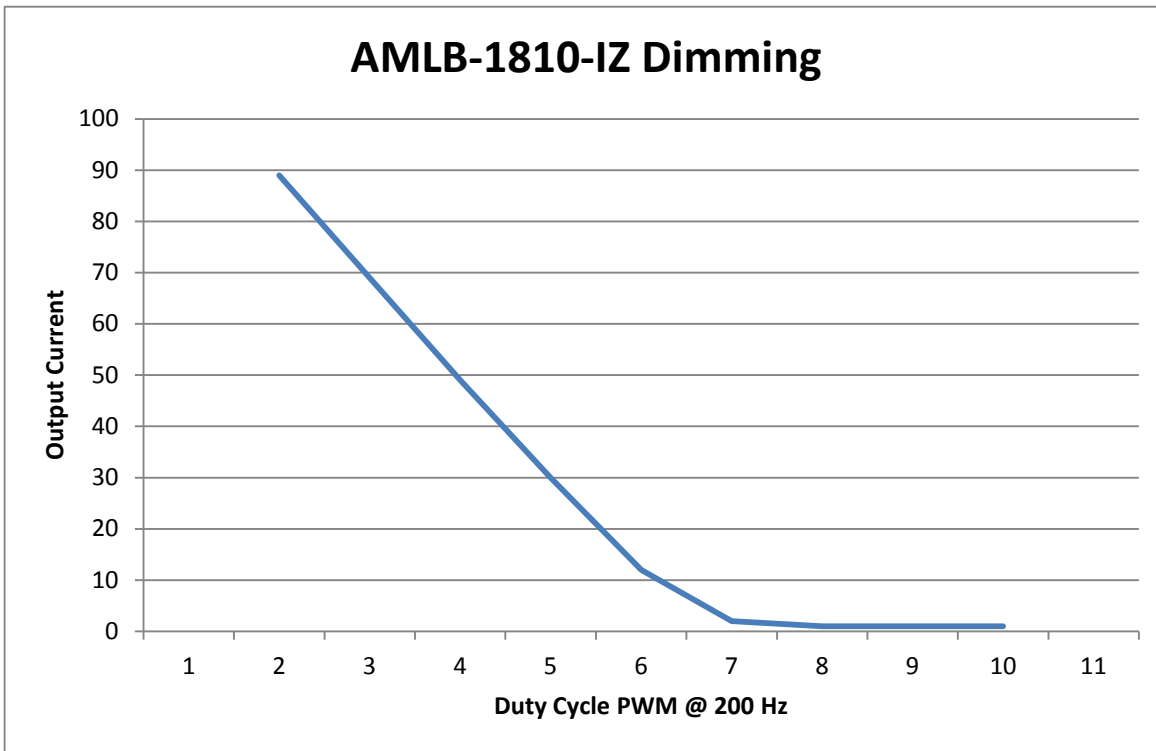
**Derating**



### Application Circuit



### Dimming Performance



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