



### FEATURES

- \* 25-30W Isolated Output
- \* 2" X 2" Six-Sided Shield Metal Case
- \* 2:1 Input Range
- \* Regulated Outputs
- \* Efficiency to 88%
- \* Remote On/Off Control
- \* UL60950-1 Approval
- \* Safety Meets IEC/EN/UL 62368-1



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	CAPACITOR LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD		
DC 1811	9-18 VDC	5 VDC	0 mA	5000 mA	30 mA	2675 mA	84	5000uF
DC 1812	9-18 VDC	12 VDC	0 mA	2500 mA	30 mA	3050 mA	88	2500uF
DC 1813	9-18 VDC	15 VDC	0 mA	2000 mA	30 mA	3050 mA	88	2000uF
DC 1821	9-18 VDC	±5 VDC	±0 mA	±2500 mA	35 mA	2675 mA	83	2500uF
DC 1822	9-18 VDC	±12 VDC	±0 mA	±1250 mA	35 mA	3050 mA	88	1250uF
DC 1823	9-18 VDC	±15 VDC	±0 mA	±1000 mA	35 mA	3050 mA	87	1000uF
DC 1831	9-18 VDC	5/±12 VDC	500/±100 mA	3500/±310 mA	35 mA	2640 mA	81	3500/310uF
DC 1832	9-18 VDC	5/±15 VDC	500/±100 mA	3500/±250 mA	35 mA	2640 mA	82	3500/250uF
DC 1833	9-18 VDC	3.3 VDC	0 mA	5000 mA	30 mA	1860 mA	80	5000uF
DC 1818	18-36 VDC	5 VDC	0 mA	5000 mA	30 mA	1336 mA	83	5000uF
DC 1819	18-36 VDC	12 VDC	0 mA	2500 mA	30 mA	1525 mA	87	2500uF
DC 1828	18-36 VDC	15 VDC	0 mA	2000 mA	30 mA	1525 mA	87	2000uF
DC 1829	18-36 VDC	±5 VDC	±0 mA	±2500 mA	30 mA	1336 mA	82	2500uF
DC 1838	18-36 VDC	±12 VDC	±0 mA	±1250 mA	30 mA	1470 mA	87	1250uF
DC 1839	18-36 VDC	±15 VDC	±0 mA	±1000 mA	30 mA	1470 mA	86	1000uF
DC 1810	18-36 VDC	5/±12 VDC	500/±100 mA	3500/±310 mA	30 mA	1320 mA	82	3500/310uF
DC 1820	18-36 VDC	5/±15 VDC	500/±100 mA	3500/±250 mA	30 mA	1320 mA	82	3500/250uF
DC 1830	18-36 VDC	3.3 VDC	0 mA	5000 mA	30 mA	920 mA	79	5000uF

NOTE: 1. Nominal Input Voltage 12, 24 or 48VDC

# SPECIFICATIONS

All Specifications Typical at Nominal Line, Full Load, and 25°C Unless Otherwise Noted

## INPUT SPECIFICATIONS:

Input Voltage Range	12V	9 – 18V
	24V	18 – 36V
	48V	36 – 72V
Input Surge Voltage (100ms max.)	12V	25Vdc max.
	24V	50Vdc max.
	48V	100Vdc max.
Input Filter	Pi Type	

## OUTPUT SPECIFICATIONS:

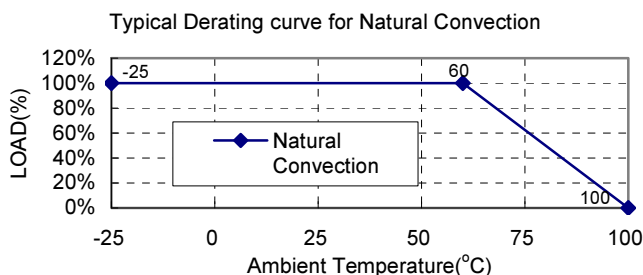
Voltage Accuracy	
Single Output	±2.0% max.
Dual +Output	±2.0% max.
Dual – Output	±3.0% max.
Triple, 5V	±2.0% max.
12V/15V	±5.0% max.
Voltage Balance (Dual)	±1.0% max.
Transient Response	
Single 25% Step Load Change	<500us
Dual FL-1/2L±1% Error Band	<500us
External Trim Adj. Range	±10%
Ripple and Noise, 20MHz BW	10mV RMS. max., 75mV p-p max.
Temperature Coefficient	±0.02%/°C max.
Short Circuit Protection	Continuous
Line Regulation Single/Dual (note1)	±0.5% max.
Triple	±1.0% max.
Load Regulation Single/Dual (note2)	±1.0% max.
Triple	±5.0% max.
Start up Time	900ms typ.

## GENERAL SPECIFICATIONS:

Efficiency	See Table
Isolation Voltage	500 VDC min.
Isolation Resistance	10 <sup>9</sup> Ohms min.
Isolation Capacitance	500pF typ.
Switching Frequency	300KHz typ.
Case Grounding	Connected to Output Common
Operating Ambient Temperature Range	-25°C to +71°C
De-rating, Above 60°C	Linearly to Zero Power at 100°C
Case Temperature (note3)	100°C max.
Cooling	Natural Convection
Storage Temperature Range	-55°C to +105°C
Humidity	95% RH max. Non Condensing
MTBF	MIL-HDBK-217F, GB, 25°C, Full Load 900Khrs typ.
EMI/RFI	Six-Sided Continuous Shield
Dimensions	2.00×2.00×0.40 inches (50.8×50.8×10.2 mm)
Case Material	Black Coated Copper with Non-Conductive Base
Weight	65g

### NOTE:

1. Measured from high line to low line.
2. Measured from full load to 1/4 full load.
3. Maximum case temperature under any operating condition should not be exceeded 100°C.

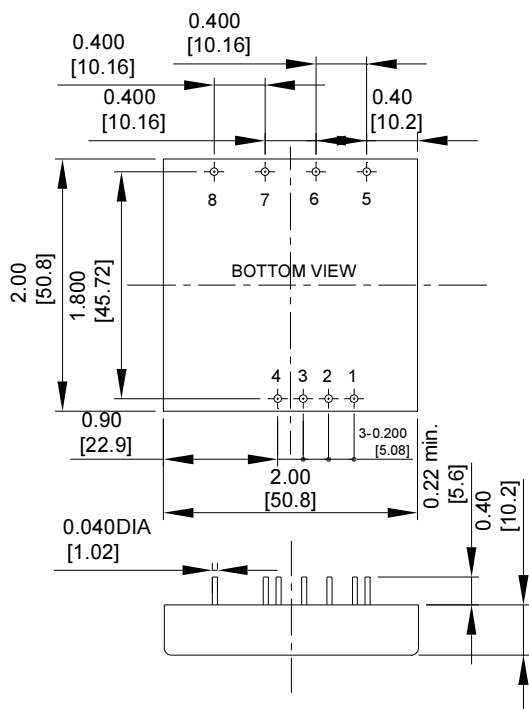


Output (Pin No.)	Voltage	Amperes	
		Min. (2)	Nom.
7	+5	0.50	3.5
8 & 5	+12 & -12	0.10	0.31
8 & 5	+15 & -15	0.10	0.25

### NOTE:

1. Maximum total power from all outputs is limited to 25 watts but no output should be allowed to exceed its maximum current
2. Minimum current on each output is required to maintain specified regulation

## Case C Dimensions:



Pin	Single	Dual	Triple
1	Remote On/Off Control		
2	No Pin	No Pin	No Pin
3	-V Input	-V Input	-V Input
4	+V Input	+V Input	+V Input
5	Trim	Trim	-Aux. Out
6	-V Output	-V Output	Common
7	+V Output	Common	+5Vout
8	No Pin	+V Output	+Aux. Out

NOTE: Pin Size is 0.04±0.004 Inch (1.0±0.1 mm) DIA  
 All Dimensions in Inches(mm)  
 Tolerances Inches: X.XX= ±0.04, X.XXX= ±0.010  
 Millimeters: X.X= ±1.0, X.XX= ±0.25

Logic Compatibility	CMOS or Open Collector TTL
Ec-On	>+5.5 VDC to 75Vdc or Open Circuit
Ec-Off	0 to <1.8 VDC
Shutdown Idle Current	10mA
Control Common	Referenced to Input Minus

## EXTERNAL OUTPUT TRIM

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.

