

DC-DC Converter

Product Specifications

DC10-xx/DD10-xx/DC20-xx/DD20-xx
Switch-Mode Power Supply

Total Power	10, 20 Watts
Input Voltages	18-36/36-75 VDC
Number of Outputs	One

ANZ#: Z063, November 27, 2001

SPECIAL FEATURES

- 2:1 input range
- High Power Density
- High Efficiency
- Regulated Output
- 1500V, 10M Ohms Isolation
- Standard Pin Assignments
- Constant Switching Freq. @ 300KHz

ELECTRICAL SPECIFICATIONS

Input range	18 – 36VDC (DCxx), 36-75VDC (DDxx)
Input Capacitance	0.94uF
Remote On/Off	Active High/ On: 3-5VDC or Open Active Low/ On: 0-1.2VDC or Short
Efficiency	80% typ. at nominal input, full maximum load
Input Filter	Pi Type
Maximum Power	10W or 20W as rated
Voltage set-point	±1% (50% load)
Load Regulation	±0.5% (10% - Full Load)
Line Regulation	±0.5%
Output Tem. Drift	±0.01% per ° C
Transient Res. Rec.	3mS Max. (25% - Full Load)
Transient Peak Dev.	2% Vout
Protection	Short circuit and overload protection @ 120%

ENVIRONMENTAL

Operating temperature:	-25 to +60 ° C
Storage temperature:	-55 to +125 ° C
Humidity (non-condensing):	5% to 95%
Vibration Frequency:	5 to 50 Hz
Acceleration:	± 7.35 M/(S*S)
Direction:	X, Y and Z axis
MTBF:	>100,000 Hours at full load and 25°C ambient conditions

SAFETY / EMC

- Meet UL1950, EN60950 safety standards
- Meet FCC Class A, EN60522 Class A

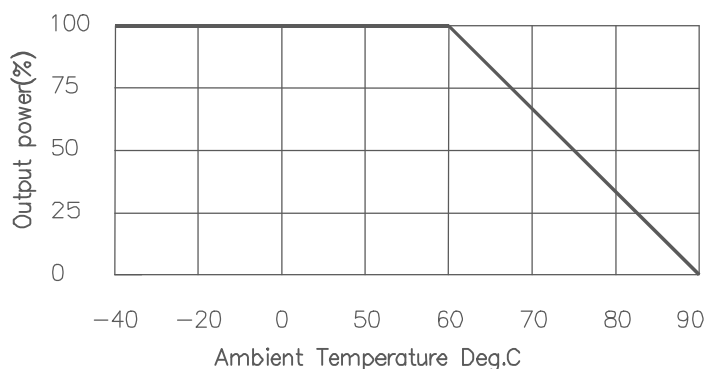
ORDERING INFORMATION

Model	Max Power	Input	Vo	Io Min.	Io Max.	Ripple P/P	Remarks
DC10-3.3V-z	10W	18-36VDC	+3.3 VDC	250 mA	2.50 A	1.5 %	
DC10-5V-z	10W	18-36VDC	+5.0 VDC	250 mA	2.00 A	1.0 %	Suffix identifier: "-z"
DC10-12V-z	10W	18-36VDC	+12.0 VDC	100 mA	0.83 A	1.0 %	0 or blank = No Option
DD10-3.3V-z	10W	36-75VDC	+3.3 VDC	300 mA	3.00 A	1.5 %	1 = Positive Logic Control (PLC)
DD10-5V-z	10W	36-75VDC	+5.0 VDC	200 mA	2.00 A	1.0 %	2 = Negative Logic Control (NLC)
DD10-12V-z	10W	36-75VDC	+12.0 VDC	100 mA	0.83 A	1.0 %	3 = Positive Logic Control & Trimm
DC20-3.3V-z	20W	18-36VDC	+3.3 VDC	500 mA	5.00 A	1.5 %	4 = Negative Logic Control & Trimm
DC20-5V-z	20W	18-36VDC	+5.0 VDC	400 mA	4.00 A	1.0 %	5 = Trimm
DC20-12V-z	20W	18-36VDC	+12.0 VDC	200 mA	1.66 A	1.0 %	
DD20-3.3V-z	20W	36-75VDC	+3.3 VDC	500 mA	5.00 A	1.5 %	
DD20-5V-z	20W	36-75VDC	+5.0 VDC	400 mA	4.00 A	1.0 %	
DD20-12V-z	20W	36-75VDC	+12.0 VDC	200 mA	1.66 A	1.0 %	

1. Ripple peak-to-peak with 20MHz bandwidth and a capacitor, 47uF/50V, cross-connected at testing point.

OUTPUT DERATING CURVE

Operating Temperature Limits and Output Power Range



MECHANICAL DRAWINGS

Input

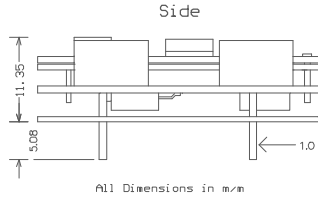
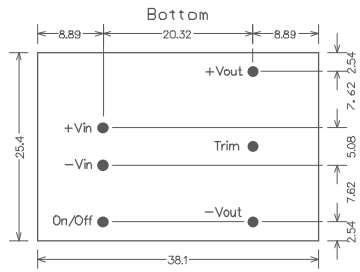
- +Vin
- Vin
- On/Off

Output

- +Vout
- Vout
- Trim

1. Specification subject to change without notice.
2. All dimensions are in mm.
3. Weight: 0.65oz/ 18.0g

DC/DD10



DC/DD20

