

Features

- 20 WATT DIL PACKAGE
- 2:1 WIDE INPUT VOLTAGE
- EFFICIENCY TO 88%
- PI INPUT FILTER
- 100% BURNED IN
- UL 94V-0 PACKAGE MATERIAL
- CUSTOMIZED SOLUTIONS AVAILABLE
- REGULATED OUTPUT TYPE



**20 Watt DC/DC
Converter**

WIDE INPUT VOLTAGE RANGE

20 WATT DC-DC CONVERTER

Input Specifications

| | | |
|--|-------------------------------|--------------------------------------|
| Input Voltage | :12Vdc | |
| Input Voltage Range | :9~18Vdc | |
| Under voltage shut down (lock-out circuit) | :8.0 Vdc Typ | |
| Remote ON/OFF | :Open or 3~12Vdc(DC/DC ON) | @ Positive logic (Standard) |
| | :Short or 0~1.2Vdc(DC/DC OFF) | (Refer to -Vin PIN) |
| | :-0.5 ~ +0.5 mA | @ Input current of Remote ON/OFF pin |
| | :3 mA TYP | @ Remote off input current |

Output Specifications

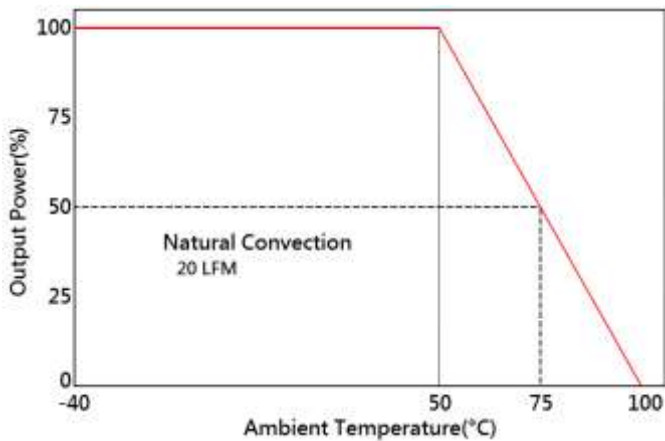
| | | |
|--------------------------|---------------|----------------------------|
| Output Voltage | :15Vdc | |
| Output Voltage Accuracy | :±2% | @ 14.7~15.3Vdc@Vin=9~18Vdc |
| Output Current | :1330mA | |
| Efficiency | :88% TYP | @ Vin=12Vdc |
| Ripple / Noise | :100mVp-p MAX | @20MHz Bandwidth |
| Short Circuit Protection | :Continuous | @Hiccup, auto-recovery |
| Line Regulation | :±0.5% MAX | @ Full Load |
| Load Regulation | :±0.5% MAX | @25% TO 100% Load |

General Specifications

| | | |
|-----------------------------|--------------------------------|---|
| Operating Temperature Range | :-40°C ~ +75°C (with derating) | Output load derate 2% per degree Celsius above 50°C as refer to temperature derating graph. |
| Storage Temperature | :-55°C ~ +125°C | |
| Switching Frequency | :330KHz TYP | |
| Humidity | :95% MAX | |
| Isolation Voltage | :1500Vdc | |
| Isolation Resistance | :1000MΩ MIN | |
| Cooling | :Natural Convection | @20LFM |
| MTBF | :>=340000 Hours | MIL-HDBK-217F@25°C,Ground Benign. |
| Case Material | :Six-side shielded case | |
| Weight | :16.5g TYP | |
| Conducted Emission | :EN55022 Class A | |
| Radiated Emission | :EN55022 Class A | |

Temperature Derating Graph

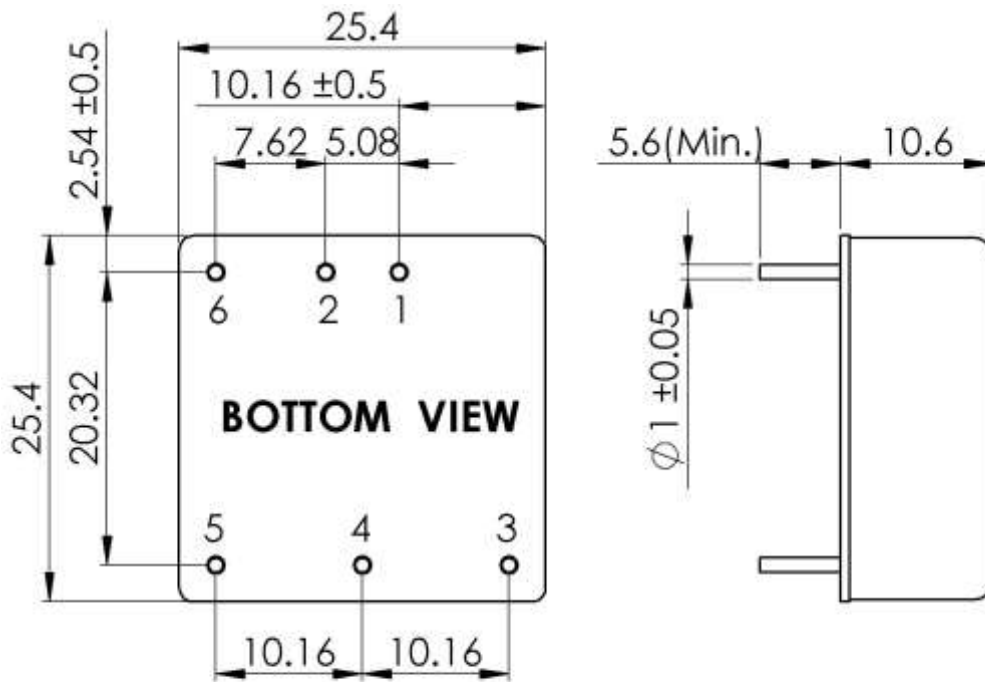
Part Number



68D20- **12** **S** **15** **R** **NL**
A **B** **C** **D** **E** **F**

- A: Series**
- B: Input Voltage**
- C: Single Output**
- D: Output Voltage**
- E: Regulated(R)**
- F: RoHs Version**

Outline Dimensions

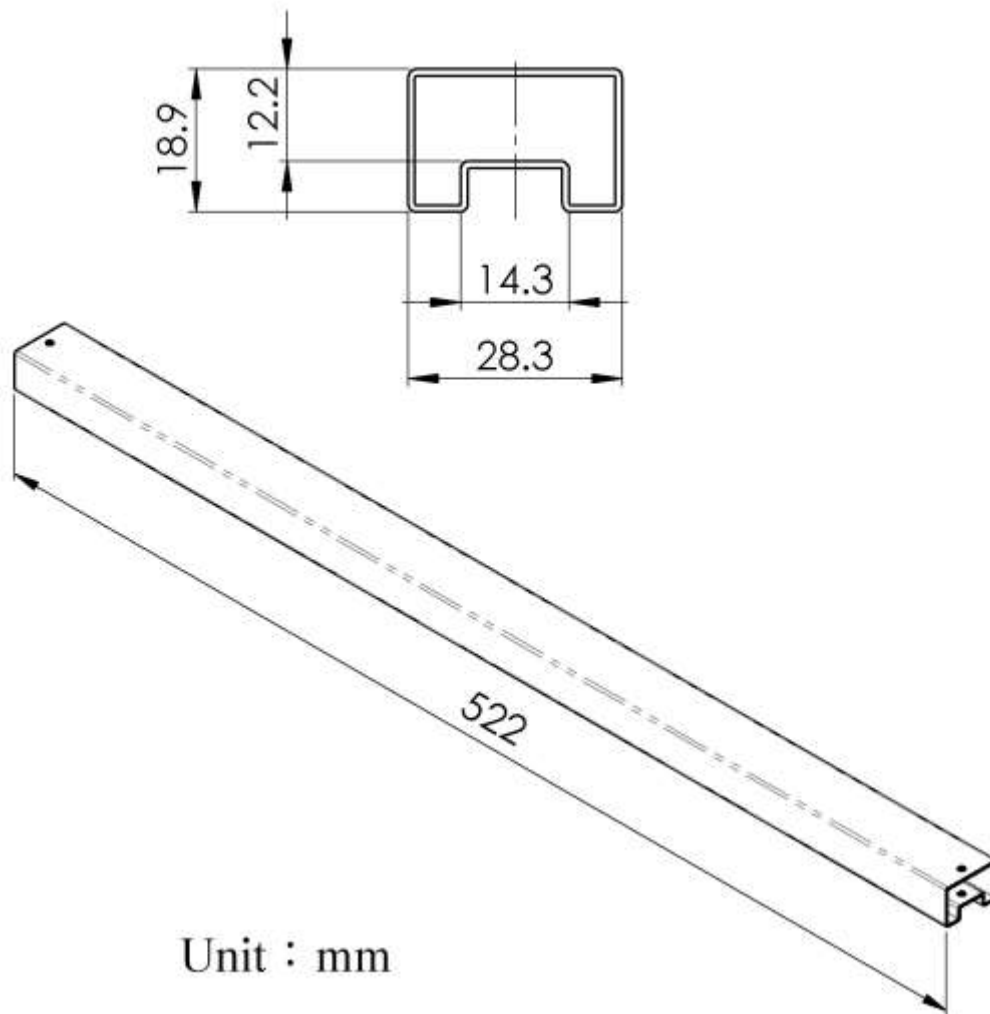


Unit : mm
Tolerance : XX.X ±0.5 , XX.XX ±0.25

PIN Assignment

| PIN | 1 | 2 | 3 | 4 | 5 | 6 |
|----------|------|------|-------|------|-------|---------------|
| FUNCTION | +Vin | -Vin | +Vout | Trim | -Vout | Remote ON/OFF |

Packing Formation



| | |
|---------------|-------------------------|
| Weight | : 16.5 grams/pcs |
| TUBE | : 19 pcs |