

**Features**

- 20 WATT DIL PACKAGE
- 2:1 WIDE INPUT VOLTAGE
- EFFICIENCY TO 89%
- 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       | :24Vdc    |
| Input Voltage Range | :18~36Vdc |

**Output Specifications**

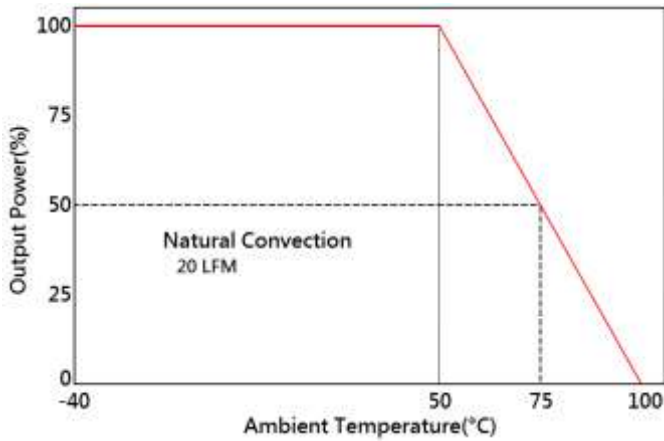
|                          |               |                              |
|--------------------------|---------------|------------------------------|
| Output Voltage           | :15Vdc        |                              |
| Output Voltage Accuracy  | :±2%          | @14.7~15.30Vdc @Vin=18~36Vdc |
| Output Current           | :1330mA       |                              |
| Efficiency               | :89% TYP      | @Vin=24Vdc                   |
| Ripple / Noise           | :100mVp-p MAX | @20MHz Bandwidth             |
| Short Circuit Protection | :Continuous   | @Hiccup, auto-recovery       |
| Line Regulation          | :±0.5% MAX    | @LL TO FL ,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 3% per degree Celsius above 65°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                     | : Free air convection           |   |
| 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

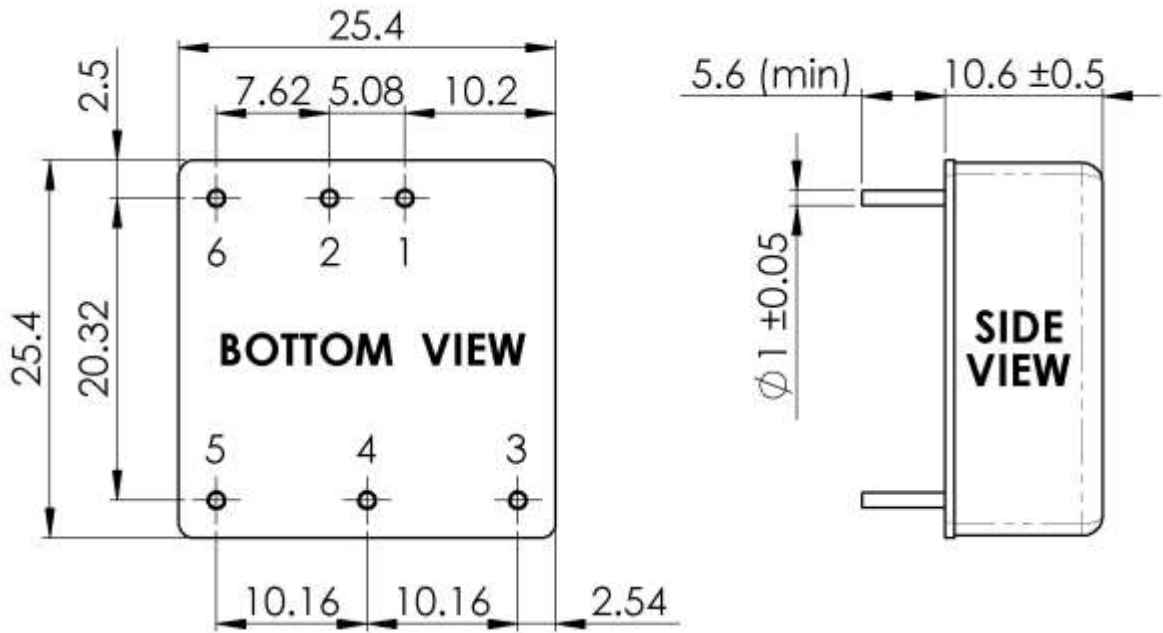
Part Number



**68D20-** **24** **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

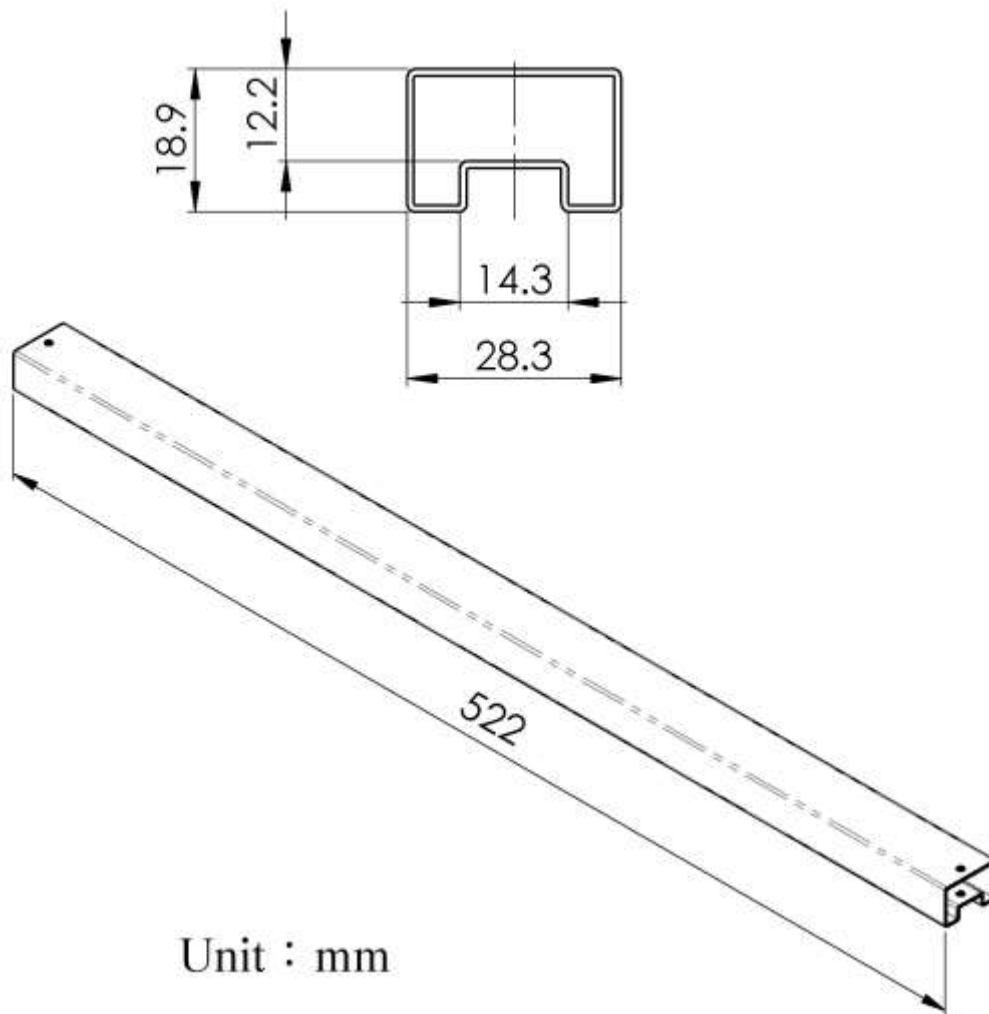


Unit : mm  
 Tolerance : XX.X ± 0.5 , XX.XX ± 0.25

PIN Assignment

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

## Packing Formation



Unit : mm

|               |                         |
|---------------|-------------------------|
| <b>Weight</b> | <b>: 16.5 grams/pcs</b> |
| <b>TUBE</b>   | <b>: 19 pcs</b>         |