

Features

- 20 WATT DIL PACKAGE
- 4:1 WIDE INPUT VOLTAGE
- EFFICIENCY TO 89%
- 100% BURNED IN
- REGULATED OUTPUT TYPE



**20 Watt DC/DC
Converter**

WIDE INPUT VOLTAGE RANGE

20 WATT DC-DC CONVERTERS

**Input Specifications**

| | | |
|--|---|---|
| Input Voltage | :24Vdc | |
| Input Voltage Range | :9~36Vdc | |
| Under voltage shut down (lock-out circuit) | :7.5Vdc TYP. | |
| Remote On/Off | : Open or 3.5~12Vdc (DC/DC ON) : Short or 0~1.2Vdc (DC/DC OFF) : -0.5 ~ +0.5 mA :3 mA TYP. | @Positive logic (Refer to -Vin PIN) @Input current of Ctrl pin @Remote off input current |

Output Specifications

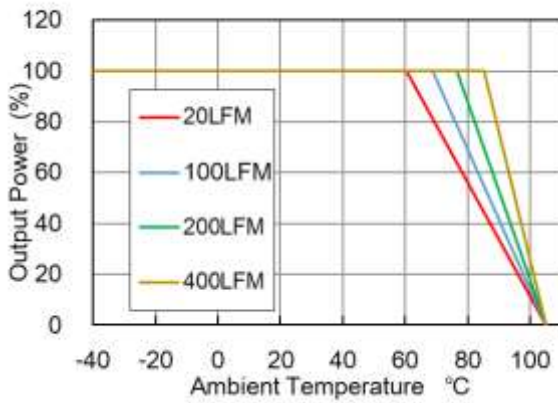
| | | |
|--------------------------|------------------|---------------------------------------|
| Output Voltage | :12Vdc | |
| Output Voltage Accuracy | : ±2% | @11.76~12.24Vdc@Vin=9~36Vdc |
| Output Current | :1670mA | |
| Efficiency | :89% TYP. | @Vin=24Vdc |
| Ripple / Noise | :100mVp-p MAX. | @20MHz Bandwidth |
| Short Circuit Protection | : Continuous | @Hiccup, auto-recovery |
| Line Regulation | : ±0.2% MAX. | @LL TO HL, Full Load |
| Load Regulation | : ±1% MAX. | @0%FL TO 100%FL |
| Start-up Time | :30ms TYP. | @Constant Resistive Load, Nominal Vin |
| Temperature Coefficient | : ±0.02%/°C MAX. | |
| Transient Response | :300µs TYP. | @25% load step change |
| Capacitor Load | :1200µF MAX. | |

General Specifications

| | | |
|-----------------------------|----------------------|---------------------------------|
| Operating Temperature Range | : -40°C ~ +60.5°C | |
| Storage Temperature | : -55°C ~ +125°C | |
| Switching Frequency | :250kHz TYP. | |
| Humidity | :95% MAX. | |
| Isolation Voltage | :1600Vdc | for 60sec. |
| Isolation Resistance | :1000MΩ MIN. | @ 500Vdc |
| Isolation Capacitance | :2200pF MAX | @100kHz, 1V |
| Cooling | : Natural Convection | @20LFM |
| MTBF | :447000Hours TYP. | MIL-HDBK-217F@25°C (calculated) |
| Case Material | : Copper | |
| Weight | :18g TYP. | |

Temperature Derating Graph

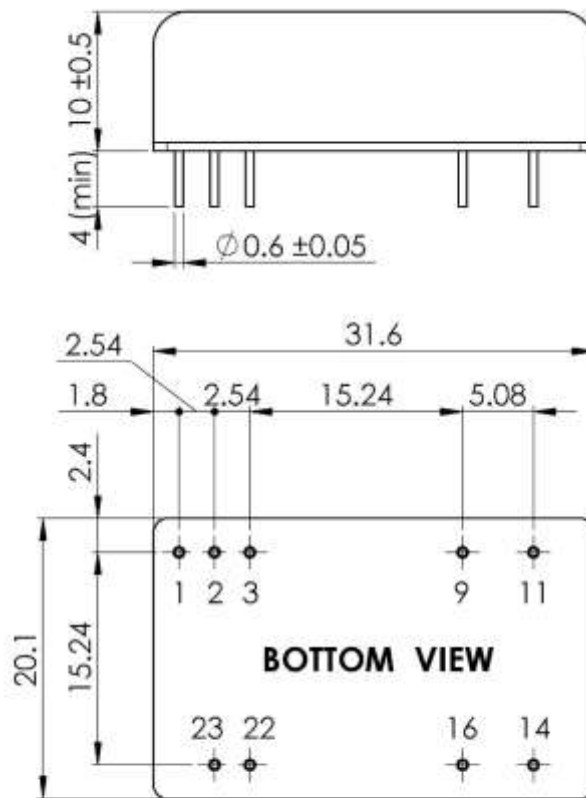
Part Number



YKB20 - **24** **S** **12**
A **B** **C** **D**

A: Series
B: Input Voltage
C: Single Output
D: Output Voltage

Outline Dimensions

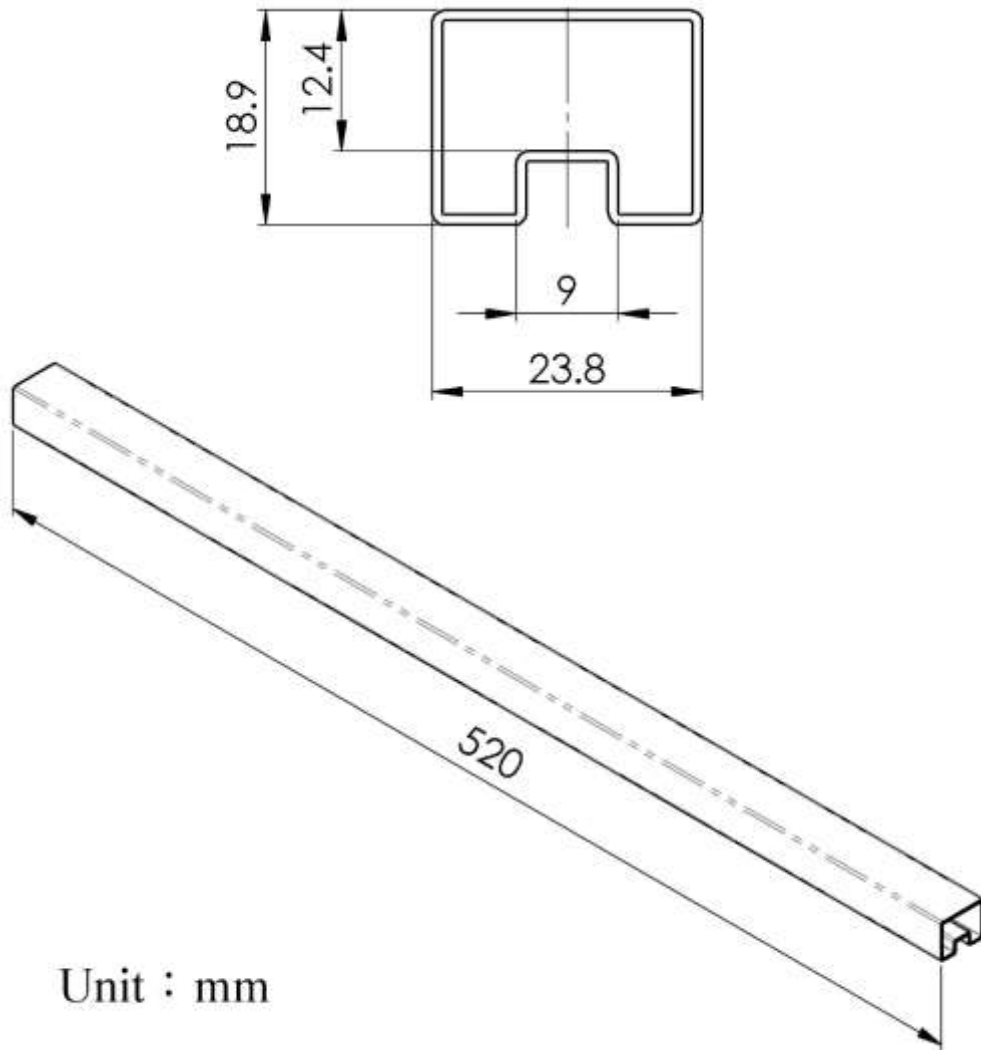


Unit : mm
 Tolerance : XX.X ± 0.5 , XX.XX ± 0.25

PIN Assignment

| PIN | 1 | 2&3 | 9 | 11 | 14 | 16 | 22&23 |
|----------|---------------|------|---------|---------|-------|-------|-------|
| FUNCTION | Remote On/Off | -Vin | No con. | No con. | +Vout | -Vout | +Vin |

Packing Formation



| | |
|---------------|-----------------------|
| Weight | : 18 grams/pcs |
| TUBE | : 15 pcs |