

**Features**

- 60 WATT DIL PACKAGE
- 4:1 WIDE INPUT VOLTAGES
- EFFICIENCY UP TO 91%
- PI INPUT FILTER
- 100% BURNED IN
- UL 94V-0 PACKAGE MATERIAL
- CUSTOMIZED SOLUTIONS AVAILABLE
- REGULATED OUTPUT TYPE



**60 Watt DC/DC  
Converter**

WIDE INPUT VOLTAGE RANGE  
60 WATT DC-DC CONVERTER



**Input Specifications**

Input Voltage	:24Vdc	
Input Voltage Range	:9~36Vdc	
Input Surge Voltage	:50Vdc Max.	@100ms Max.
Start-up Voltage	:9Vdc Max.	
Under Voltage Shutdown	:7.5Vdc Typ.	
Start-up Time (constant resistive load)	:30ms Typ.	@Power-up & Remote
Input Filter	:Internal PI Type	
Remote ON/OFF	:Open or 3.5~12Vdc(DC/DC ON)	@Positive logic (Refer to –Vin Pin)
	:Short or 0~1.2Vdc(DC/DC OFF)	
	:-0.5 ~ +0.5mA	@Input Current of Remote On/Off Pin
	:3mA Typ.	@Remote Off Input Current

**Output Specifications**

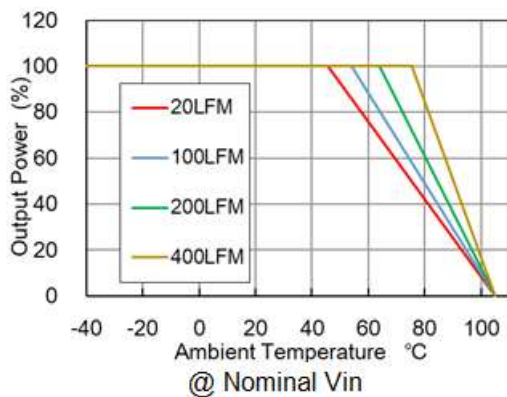
Output Voltage	:24Vdc	
Output Voltage Accuracy	:±2%	@23.52~24.48Vdc @Vin=9~36V
Output Current	:2500mA	
Efficiency	:91% Typ.	@Vin=24Vdc
Ripple & Noise	:150mVp-p Max.	@20MHz Bandwidth , with 1uF*1 MLCC and 10uF*1 TC
Output Power Protection	:180% Max.	@Hiccup, auto-recovery
Over Voltage Protection	:30Vdc Typ.	
Short Circuit Protection	:Continuous	@Hiccup, auto-recovery
Line Regulation	:±0.2% Max.	@Full Load
Load Regulation	:±0.5% Max.	@0% TO 100% Load
Voltage adjustability	:±10% Max.	
Temperature Coefficient	:±0.02%/°C Max.	
Transient Response Setting Time	:350us Typ.	@25% Load Step Change
Transient Response Deviation	:±5% Max.	@25% Load Step Change

**General Specifications**

Operating Temperature Range	: -40°C ~ +45.7°C	Without derating @ Nominal Vin
Operating Case Temperature	: +105°C Max.	
Over Temperature Protection	: +115°C Typ.	@ Case Temperature
Storage Temperature	: -55°C ~ +125°C	
Switching Frequency	: 280KHz Typ.	
Humidity	: 95% Max.	@ Non Condensing
Isolation Voltage	: 1600VDC	@ Input To Output
	: 1000VDC	@ Input(Output) To Case
Isolation Resistance	: 1000M Ω Min.	@ 500Vdc
Isolation Capacitance	: 2200pF Max.	
Cooling	: Natural Convection	@ 20LFM
Case Material	: Copper	
Potting material	: Silicone (UL94-V0)	
MTBF	: 2.59x10 <sup>5</sup> Hours	MIL-HDBK-217F @ 25°C
Weight	: 48g Typ.	

**Temperature Derating Graph**

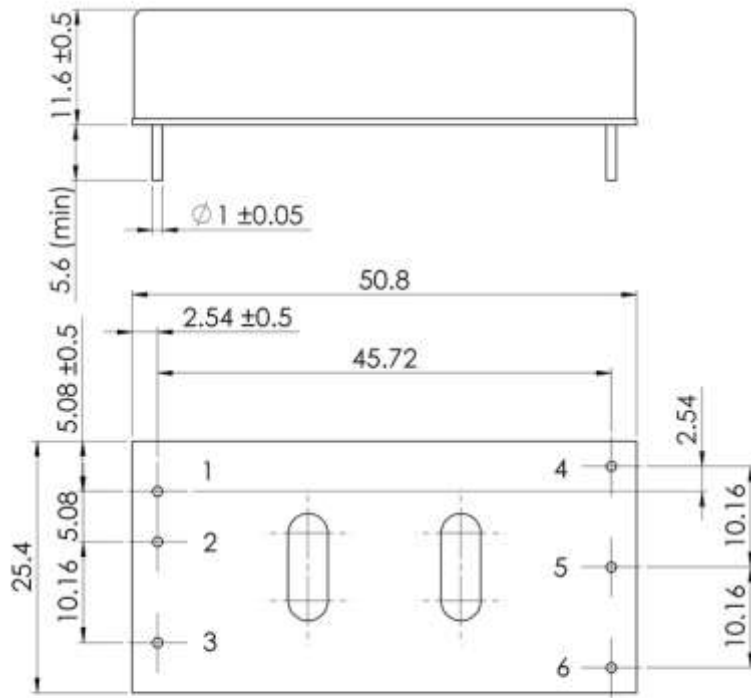
**Part Number**



**YNB 60 - 24 S 24**  
**A B C D E**

- A: Series**
- B: Output Power**
- C: Input Voltage**
- D: Single Output**
- E: Output Voltage**

**Outline Dimensions**



**BOTTOM VIEW**

Unit : mm

Tolerance : XX.X ± 0.5 , XX.XX ± 0.25

**PIN Assignment**

PIN	1	2	3	4	5	6
FUNCTION	+Vin	-Vin	Remote On/Off	+Vout	-Vout	Trim