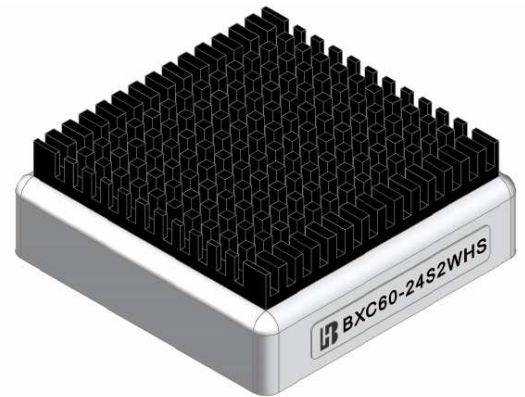


Features

- Wide 4 : 1 Input Voltage Range
- High Power Density
- High Efficiency
- Operating Temperature Range: -40°C to +85°C
- Output Short Circuit Protection:
Hiccup, continuous & Auto Recovery
- Output Over Voltage Protection:
- Over Temperature Protection
- Fixed Switching Frequency
- Input/ Output Isolation 1.5 kVdc
- Shielded Metal Case with Insulated Baseplate
- Lead Free Design, RoHS Compliant
- Industry Standard Pinout
- Adjustable Output Voltage



Applications

- Distributed power system
- Telecommunication application
- Battery powered equipment
- Industrial application
- Process control equipment
- Transportation equipment

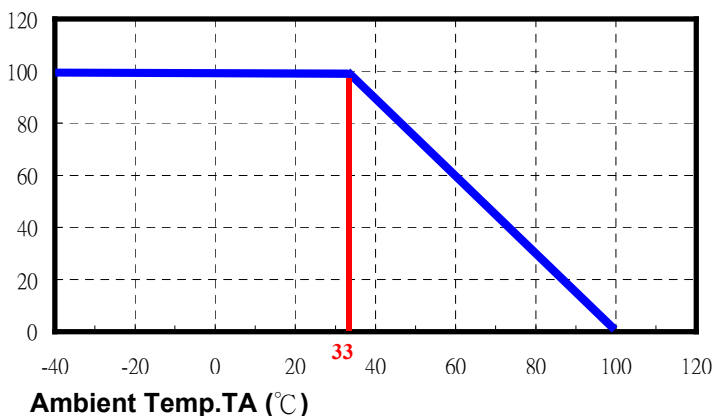
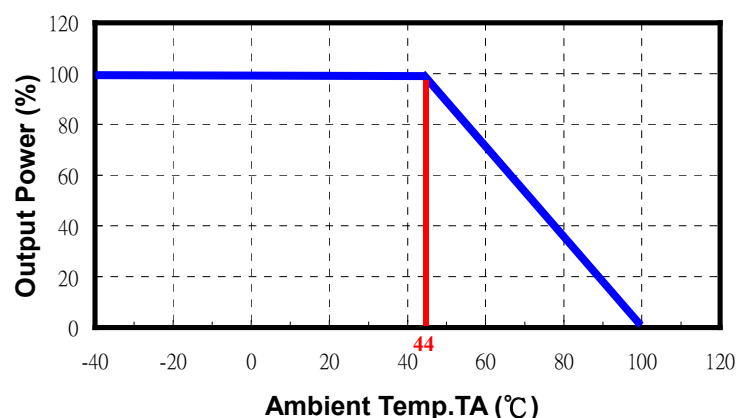
Input Specifications

Input voltage range		9~36Vdc
Under voltage shutdown	Full Load	8Vdc (typical)
Input current	Vin=24Vdc and no Load	100mA (typical)
Input current	Vin=24Vdc and full Load	2976mA (typical)
Input current	Vin=24Vdc and output shorted	10mA (typical)
Remote ON/OFF	Converter: ON	Open or 3.5V < Vr < 12V
	Converter: OFF	Short ⁽²⁾ or 0V < Vr < 0.7V
Sourcing current of remote control pin	Nominal Vin	< 0.2mA
Idle input current (at Remote OFF state)	Nominal Vin	< 12mA

Output Specifications

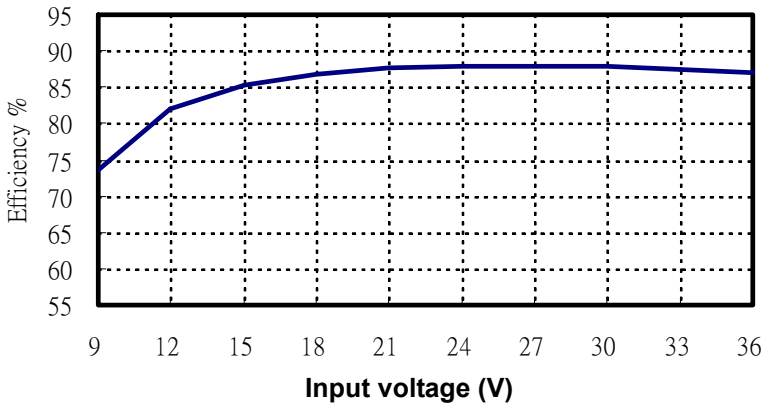
Output voltage		12 Vdc
Output voltage accuracy	Vout=11.88 ~ 12.12Vdc	±1%
Maximum Load		5A
Minimum Load		0A
Maximum capacitive load		4700uF (maximum)
Efficiency	Vin=24Vdc and full load	88% (typical)
Ripple / Noise	20MHz bandwidth.	80mVp-p (maximum)
Temperature coefficient		±0.02%/°C (maximum)
Output short circuit protection	Automatic recovery	Hiccup, Continuous
Output over voltage protection		15V (typical)

Line regulation	LL to HL at full load	±0.5% (maximum)
Load regulation	25% load to full load	±0.5% (maximum)
Dynamic Characteristics		
Transient response over shoot	di/dt=0.8A/μs	≤ ±5% of Vo
Transient response settling time	50% load step change	180μs (typical)
Start-up time	Nominal Vin and full load	60msec (typical)
Switching frequency		300kHz (typical).
General Specifications		
Reliability, calculated MTBF		≥ 8.88×10 ⁵ hours
Operating ambient temperature	With derating	-40°C ~+85°C
Maximum case surface temperature		100°C
Storage temperature range		-55°C ~+125 °C
Relative humidity		95% RH (maximum)
Isolation voltage	Input to output	1500Vdc
Isolation capacitance	Input to output	1200pF (typical)
Isolation resistance	Input to output (500Vdc)	10 ⁹ Ω (minimum)
Cooling	Free air convection	
Physical Specifications		
Case material		Nickel-coated copper
Base material		FR4 PCB
Potting material		Silicon rubber (UL94V-0)
Dimensions		2.00 × 2.00 × 0.50 Inch (50.8 × 50.8 × 12.6 mm)
Weight		103g (3.63oz) (typical)
Soldering temperature	Lead-free wave soldering	260°C/10Sec (maximum)
Absolute Maximum Ratings		
Input surge voltage	100msec.	50Vdc
Performance Curves		

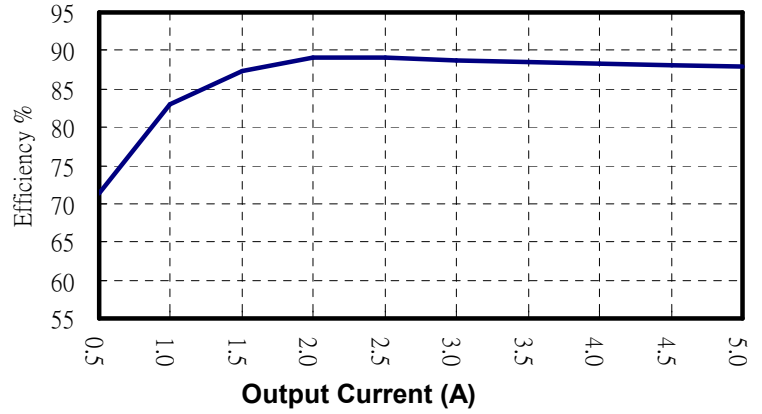
Power Derating Curve (Without Heatsink)

Power Derating Curve (With Heatsink)




Input voltage vs. Efficiency



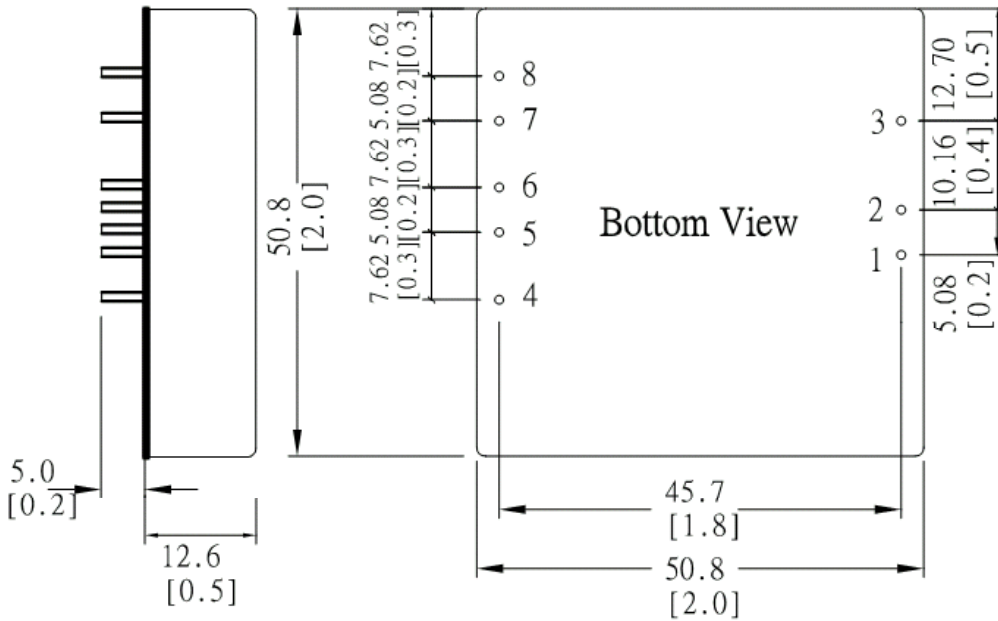
Output Current vs. Efficiency



Note

1. Typical value, tested at nominal input and full load.
2. Short to -Vin (Pin 2).

Mechanical Dimensions



Pin Assignment	
Pin	Single
1	+Vin
2	-Vin
3	Remote On/Off
4	-Sense
5	+Sense
6	+Vout
7	-Vout
8	Trim

Unit: mm [inch]
Tolerance: ±0.5 [±0.02]



Heat-sink

Material: Aluminum

Weight: 19g (0.67oz) (without converter)

