



Features

- Wide Input Voltage Range (66 ~ 160Vdc)
- High Power Density
- High Efficiency
- Operating Temperature Range: -40°C to +74°C
- Output Short Circuit Protection
- Output Over Voltage Protection
- Fixed Switching Frequency
- Input/ Output Isolation 1.5 KVdc
- Shielded Metal Case with Insulated Baseplate
- Lead Free Design, RoHS Compliant
- Industry Standard Pinout
- Customer Design Available



Applications

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

Input Specifications

Input voltage range		66~166Vdc
Under voltage shutdown	Full Load	59Vdc(typical)
Input current	Vin=110Vdc and no Load	6mA(typical)
Input current	Vin=110Vdc and full Load	120mA(typical)
Input current	Vin=110Vdc and output shorted	15mA(typical)

Output Specifications

Output voltage		5.05Vdc
Output voltage accuracy	Vout=5.049 ~ 5.151Vdc	±1%
Maximum Load		2000mA
Minimum Load		0mA
Maximum capacitive load		3300uF(maximum)
Efficiency	Vin=110Vdc and full load	80%(typical)
Ripple / Noise	20MHz bandwidth.	50mVp-p (maximum)
Temperature coefficient		±0.02%/°C (maximum)
Output short circuit protection	Automatic recovery	Continuous
Output over voltage protection		6.2V(typical)
Line regulation	LL to HL at full load	±0.5%(maximum)
Load regulation	25% load to full load	±1%(maximum)



Dynamic Characteristics

Transient response over shoot	$di/dt=0.8A/\mu s$	$\leq \pm 5\%$ of V_o
Transient response settling time	50% load step change	800 μs (typical)
Start-up time	Nominal V_{in} and full load	680msec(typical)
Switching frequency		300kHz (typical).

General Specifications

Reliability, calculated MTBF		$\geq 1.96 \times 10^6$ hours
Operating ambient temperature	With derating	-40°C ~ +74°C
Maximum case surface temperature		105°C
Storage temperature range		-55°C ~ +105 °C
Relative humidity		95% RH(maximum)
Isolation voltage	Input to output	1500Vdc
Isolation capacitance	Input to output	1000pF(maximum)
Isolation resistance	Input to output (500Vdc)	$10^9 \Omega$ (minimum)
Cooling	Free air convection	

Physical Specifications

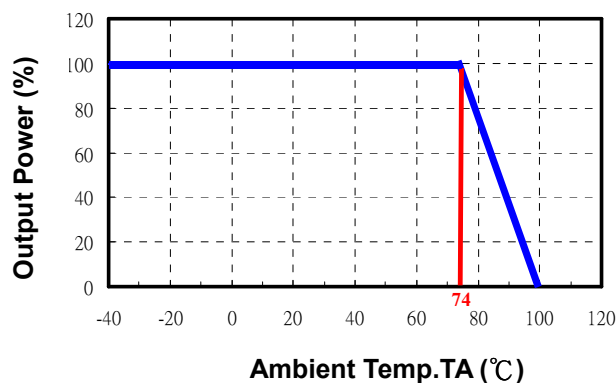
Case material		Nickel-coated copper
Base material		Non-conductive black plastic
Potting material		Silicon rubber (UL94V-0)
Dimensions		2.00 × 1.00 × 0.40 Inch (50.8 × 25.4 × 10.2 mm)
Weight		32.0g (1.13oz) (typical)
Soldering temperature	Lead-free wave soldering	260°C / 10Sec(maximum)

Absolute Maximum Ratings

Input surge voltage	100msec.	250Vdc
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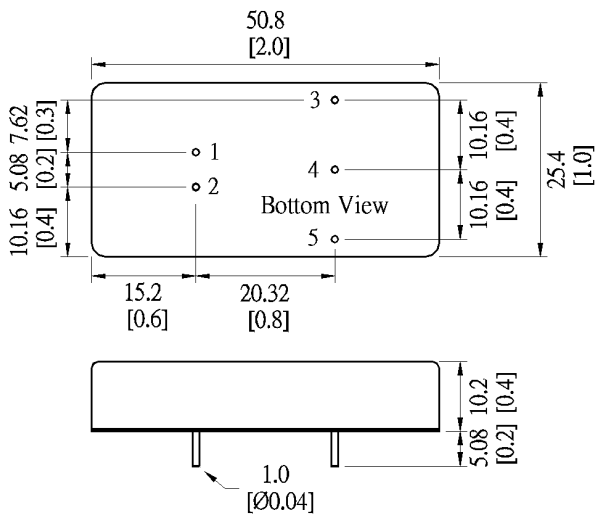
Performance Curves

Power Derating Curve





Mechanical Dimensions



Pin Assignment	
Pin	Single
1	+Vin
2	-Vin
3	+Vout
4	No pin
5	-Vout

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