

RP15-4812.5DFW



Input Range	Output Voltage	Output Current	Output ⁽²⁾ Ripple & Noise	Input Current ⁽¹⁾	Eff ⁽²⁾ (%)	Capacitor ⁽³⁾ Load max
18 – 75 VDC	±12.5 VDC	600mA	75mVp-p	372mA	88	±625µF

TECHNICAL SPECIFICATION

All specifications are typical at nominal input, full load and 25°C otherwise noted

OUTPUT SPECIFICATIONS			
Output power		15 Watts max.	
Output voltage		±12.5VDC	
Output current		600mA	
Voltage accuracy	Full load and nominal Vin	± 1%	
Minimum load		0%	
Line regulation	LL to HL at Full Load	± 0.5%	
Load regulation	0% to 100% FL	± 1%	
Ripple and noise	20MHz bandwidth (Measured with a 0.1µF/50V MLCC)	75mVp-p	
Temperature coefficient		± 0.02% / °C, max.	
Transient response recovery time		25% load step change	250µS
Over load protection	% of FL at nominal input	150%, typ.	
Short circuit protection		Hiccup, automatic recovery	
Over voltage protection Zener diode clamp		±15VDC	
INPUT SPECIFICATIONS			
Input voltage range		48V nominal input	18 – 75VDC
Under voltage lockout		DC-DC ON	9VDC
		DC-DC OFF	7.5VDC
Input filter		Pi type	
Input surge voltage 100mS max		100VDC	
Start up time	Nominal Vin and	Power up	20mS, typ.
GENERAL SPECIFICATIONS			
Efficiency		88%	
Isolation voltage	Input to Output	1600VDC, min.	
	Input (Output) to Case	1600VDC, min.	
Case grounding		Connect case to -Vin with decoupling Y Cap	
Isolation resistance		10 ⁹ ohms, min.	
Isolation capacitance		1500pF, max.	
Switching frequency		400KHZ, typ.	
Design meet safety standard		IEC60950-1, UL60950-1, EN60950-1	
Case material		Nickel-coated copper	
Base material		FR4 PCB	
Potting material		Epoxy (UL94-V0)	
Dimensions		2.00 X 1.00 X 0.40 Inch (50.8 X 25.4 X 10.2 mm)	
Weight		27g (0.95oz)	
ENVIRONMENTAL SPECIFICATIONS			
Operating ambient temperature		-40°C ~ +80°C (without derating) +80°C ~ +105°C (with derating)	
Maximum case temperature		105°C	
Storage temperature range		-55°C ~ +125°C	
Thermal impedance (Note 4)		Nature convection	12°C/Watt
		Nature convection with heat-sink	10°C/Watt
Thermal shock		MIL-STD-810F	
Vibration		MIL-STD-810F	
Relative humidity		5% to 95% RH	

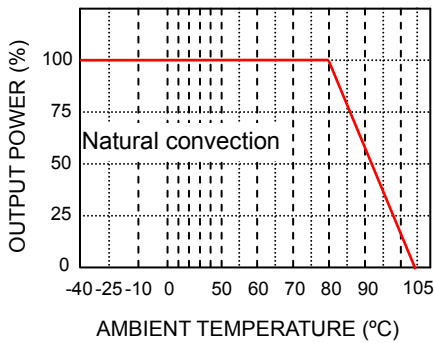
Note

1. Maximum value at nominal input voltage and full load.
2. Typical value at nominal input voltage and full load.
3. Test by minimum Vin and constant resistive load.
4. Heat sink is optional and P/N: 7G-0020C-F.

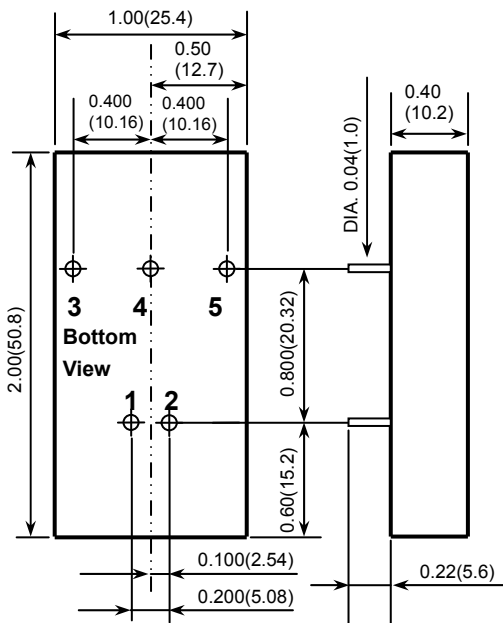
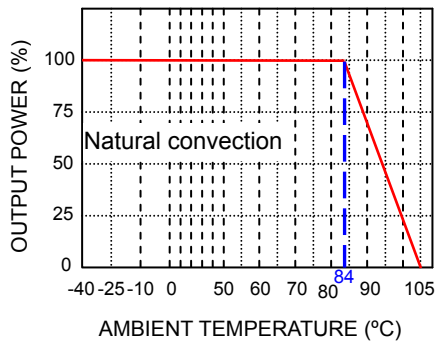
RP15-4812.5DFW



RP15-4812.5DFW
Derating Curve



RP15-4812.5DFW
Derating Curve with Heat-Sink



1. All dimensions in Inches (mm)
Tolerance: X.XX±0.02 (X.X±0.5)
X.XXX±0.01 (X.XX±0.25)
2. Pin pitch tolerance ±0.01(0.25)
3. Pin dimension tolerance ±0.004 (0.1)

PIN CONNECTION	
PIN	RP15-4812.5DFW
1	+ INPUT
2	- INPUT
3	+ OUTPUT
4	COMMON
5	- OUTPUT