PowerGood™

NEW

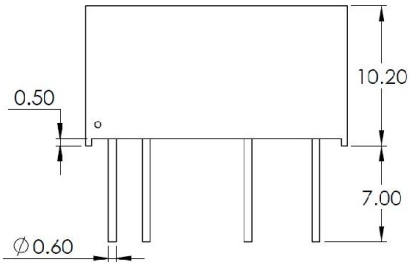
Unicorn Series

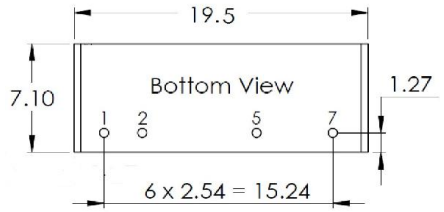
Preliminary Datasheets

Model Selection Guide

Typical @ Ta=+25˚C under nominal line voltage and full load conditions unless noted.

Model	Input		Output			Efficiency @FL
	Voltage(V) Range	Current(A) Full load	Voltage (V)	Current (A)	Power (W)	Typ.(%)
U3-05A	4.5-5.5	0.73	5.0	0.6	3	82%
U3-24A	9-36	0.15	5.0	0.6	3	82%





Pin Connection	
Pin#	Single
1	+Vin
2	-Vin
5	-Vout
7	Vout
Tolerance: xx.x=	±0.5mm
xx.xx=	±0.25mm
Pin dimension:	±0.1mm

Electrical Specifications

Typical @ Ta=+25˚C under nominal line voltage and full load conditions unless noted.

Input

Parameter	Notes and Conditions	Min.	Typ	Max.	Unit
Operating Input Voltage ranges	U3-5X	4.5	5	5.5	VDC
	U3-24X	9	24	36	VDC
Transient Input Voltage ranges	U3-5X			9	VDC
	U3-24X			50	VDC
Input Filter	All models	Capacitor			

Output

Parameter	Notes and Conditions	Min.	Typ	Max.	Unit
Output Voltage Accuracy	100% Load			±5	%
Line Regulation	U3-5X, Low line to High line at ±1.0% of Vin typ.			±1.2	%
	U3-24X, Low line to High line			±10	%
Load Regulation	10% to 100% load			±15	%
Ripple & Noise (20MHz bandwidth)				100	mV pk-pk
Minimum Load		0			%
Short-circuit Protection	Continuous				

General Specifications

Parameter	Notes and Conditions	Min.	Typ	Max.	Unit
Switching Frequency	U3-5X		70		KHz
	U3-24X		200		KHz
Storage Temperature range	All models	-55		125	˚C
Operating Case Temperature	All models, no derating	-40		85	˚C
Isolation Voltage	All models, 1 Minute	3000			VDC
Isolation Resistance	All models, 500VDC	1000			MΩ
Isolation Capacitance	U3-5X		8		pF
	U3-24X		40		
Humidity	All models			95	%
Calculated **MTBF**	MIL-HDBK-217F@25 ˚C		TBD		Hours
Weight			2.7		g (oz.)
Efficiency	See model selection guide				
Dimensions	0.77"x0.28"x0.40" (19.50 x 7.10 x 10.2 mm)				
Case Material	plastic				

It is recommended to protect the input by fuses or other protection devices.