

FEATURES :

- 3PIN SIP Package
- Pin-out compatible with LM78XX Linear regulators
- Wide Input Voltage Range 4.75~36VDC
- Efficiency up to 97%, Non isolated, no need for heatsink
- Regulated Output Types
- Short Circuit Protection
- Operating Temperature: -40°C TO +97°C
- UL94V-0 Package Material
- 100% Burned In
- 3 Years Warranty

electronic**power**solutions**DC-DC Converter****01D-3AC SERIES****10Watt****Non-Isolated****Single Output****0.59" x 0.37" x 0.72" Size**

Specifications typical at TA=25°C, nominal input voltage
and rated output current unless otherwise specified

Selection Guide

Part Number	Input Voltage Range	Output Voltage	Output Current	Efficiency		Maximum capacitor Load
				Min. Vin	Max. Vin	
	Vdc	Vdc	mA (typ)	% (typ)	% (typ)	μF
01D-2R5-3AC	4.75-26	2.5	3000	93	84	3000
01D-3R3-3AC	4.75-26	3.3	3000	90	87	3000
01D-05-3AC	7-26	5	3000	95	90	3000
01D-12-3AC	15-36	12	3000	96	94	1800
01D-15-3AC	18-36	15	3000	97	94	1200

Part Number

$$\frac{01D}{A} - \frac{10}{B} - \frac{3A}{C} \frac{C}{D}$$

A: Series

B: Output Voltage

C: Maximum Output Current

D: Metal Case



Input Specifications

Parameters	Conditions		Min	Typ	Max	Units
Input Voltage	See models table		4.75		36	Vdc
No Load Input Current	All models, Max. Vin			25	30	mA
Maximum Input Current	Mini. Vin, Full Load	01D-2R5-3AC			1698	mA
		01D-3R3-3AC			2316	
		01D-05-3AC			2256	
		01D-12-3AC			2500	
		01D-15-3AC			2577	
Start-up Time	100% Load	01D-2R5-3AC 01D-3R3-3AC 01D-05-3AC			10	ms
		01D-12-3AC 01D-15-3AC			14	
Input Filter	All Models		Internal Capacitor			

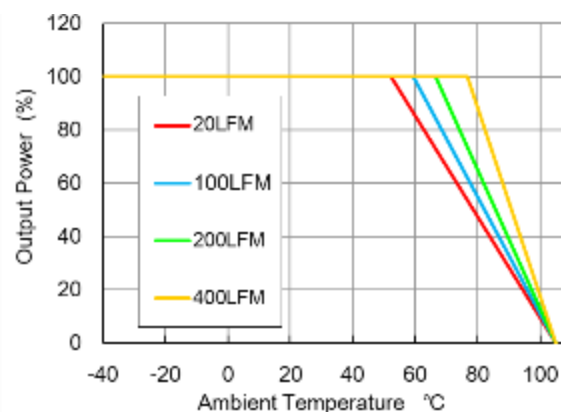
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% Load		±2		%
Line Regulation	Vin(min) to Vin(max) @100% Load	-0.2		+0.2	%
Load Regulation	0% Load to 100% Load	-0.8		+0.8	%
Minimum Load	not required				mA
Ripple & Noise (BW=20MHz)	Without Output Capacitor	01D-2R5-3AC, 01D-3R3-3AC		50	mVp-p
		01D-05-3AC		75	
		01D-12-3AC, 01D-15-3AC		150	
Transient Response Setting Time	50% Load Step Change (upper half)		150		us
Transient Response Deviation	50% Load Step Change (upper half)		250		%
Current Limit	% of Io, Hiccup mode, Auto-recovery	180			%
Short Circuit Protection	Continuous [Hiccup Mode] ,Auto-Recovery				
Temperature Coefficient		-0.02		+0.02	%/°C

General Specifications

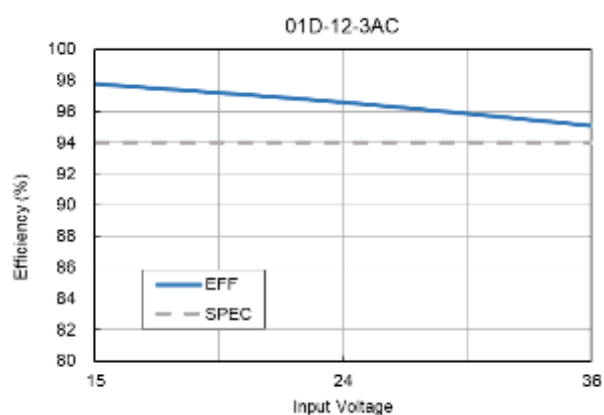
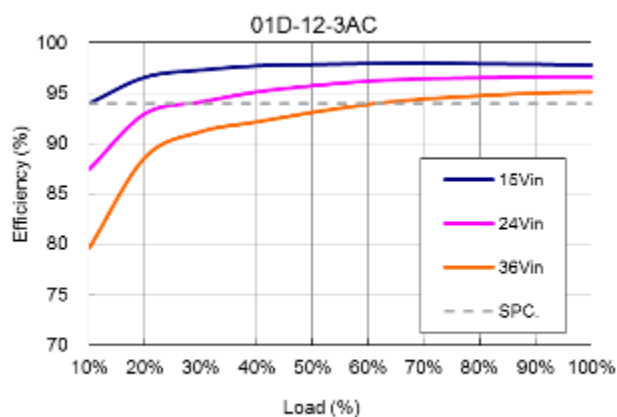
Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency	100% Load, Nominal Input		310		KHz
Operating Ambient Temperature (Power Derating See Derating Graph)	Max. Vin, 100% Load	-40		72.1	°C
				71.0	
				66.7	
				52.1	
				38.9	
Thermal Impedance	20LFM		23.0		°C/W
	100LFM		19.8		
	200LFM		16.7		
	400LFM		12.4		
Maximum Case Temperature				105	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing	5		95	%
Cooling	Natural Convection				
Thermal Shock	MIL-STD-810F				
Shock & Vibration Test	MIL-STD-810F				
Case Material	Copper, Black Coating				
Potting Material	Silicone (UL94-V0)				
MTBF	MIL-HDBK-217F@25°C (calculated)		5.16x10 ⁶		Hours
Weight			13		g
Dimensions			14.9 x 9.5 x 18.4		mm

Temperature Derating Graph

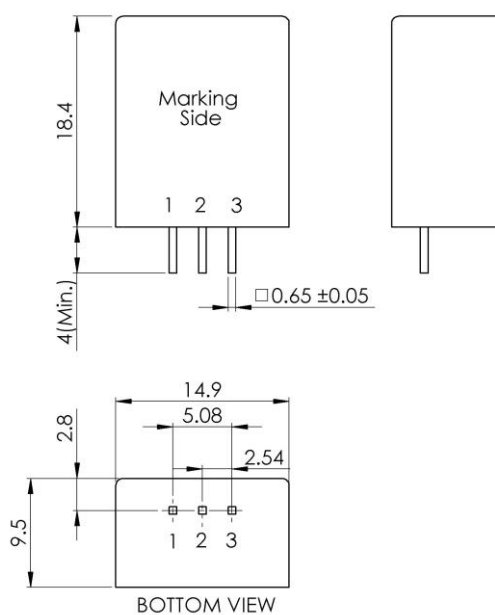


01D-12-3AC (@Max. Vin)

Characteristic Curve



Dimensions



Unit : mm
Tolerance : XX.X ± 0.5 , XX.XX ± 0.25

PIN Assignment

Pin	Define	Diameter
1	+Vin	0.65mm[0.026"]
2	GND	0.65mm[0.026"]
3	+Vout	0.65mm[0.026"]