AMX10 series

10W DC to DC Converter

Features

- 2:1 & 4:1 Wide Input Range Voltage
- Regulated Output
- Single or Dual Output
- 1500VDC Isolation
- Potting Material : Epoxy(Flammability to UL94V-0)
- Pin Material : Brass, Solder Coated
- Case Material: Nickel-Coated Copper with Non-Conductive Base
- Over Voltage Protection(clamp)
- Short Circuit Protection : Automatics recovery
- 1 year warranty



Electrical Characteristics

	Input Voltage for AMB10			9~18VDC
Vin	Input Voltage for AMC10			18~36VDC
	Input Voltage for AMD10			36~75VDC
	Input Voltage for AMF10			9~36VDC
	Input Voltage for AMG10			18~75VDC
Fs	Switching Frequency		300kHz (typ.)	
Ро	Output Power Range		10W	
Vo	Output Voltage Range		See rating chart	
lo	Output Current Range		See rating chart	
Acc	Output Voltage Accuracy	Io=Full load, Vin=Typ., at 25°C		2.0% (typ.)
Eff	Efficiency	lo=Full load, Vin=Typ., at 25°C		70~83%
REG-i	Line Regulation	Io=Full load, Vin=Vmax to Vmin, at 25°C		0.5% (max.)
REG-o	Load Regulation	lo=20% to 100%, Vin=Typ., at 25°C	Single Output	0.5% (max.)
REG-0			Dual Output	2.0% (max.)
ОСР	Over Current Protection	lo=Full load, Vin=Typ., at 25°C		110~160%
Trp	Time of Transient Response	Load of 75% to 100%		300μS (max.)
Vp-p	Ripple & Noise(Peak to Peak)	lo=Full load, Vin=Typ., at 25°C		1% (typ.)
тс	Temperature Coefficient	All output		±0.05%/°C

Note: The Ripple & Noise which is 5VDC & 3.3VDC are 80mV(max). All specifications are measured at typical input, full load and 25°C unless otherwise noted.

Environmental

То	Operating Temperature	Without derating	-40~75°C
	Maximum Case Temperature		95°C (max.)
Ts	Storage Temperature		-55~115°C
Hr	Relative Humidity		0~95%
MTBF	Operating Temperature at 25°C	Calculated per MIL-HDBK-217F	1M Hrs (min.)
Cool	The Cooling Condition is Free		
Filter	Internal Capacitor		

Safety Specification

Vio	Dielectric With Standing Voltage for input to output	Input to output	1500VDC (min.)
Vioc	Dielectric With Standing Voltage for input or output to case	Input or output to case	1500VDC (min.)
Ris	Isolation Resistance		1000M (min.)
EP	Potting Material is Epoxy which is flammability to UL94V-0		
CISPER	EMI requirements for CISPER-22	lo-Full load, Vin=Typ., At 25°C	A CLASS
FCC	EMI requirements for FCC PART-15	lo-Full load, Vin=Typ., At 25°C	A CLASS

Note: For meeting CISPER and FCC, some filters must be added. (Please refer Emissions Solution)

Application:

- Automatic Control System
- Industry Control System
- Medical System
- Distributed Power Achitectures

Safety Approvals:

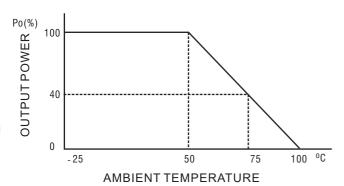






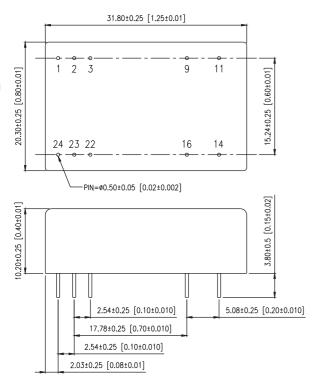
^{*} The typical efficiency is measured at nominal input, 25°C and at the module terminals.

Derating Curve:



Note: At nominal input, Full load and cooling is natural convection.

Mechanical Specifications:



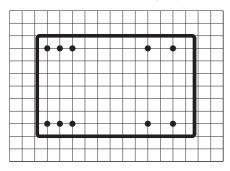
Pin Connections:

Pin	Single	Dual
22 & 23	+Vin	+Vin
2 & 3	- Vin	- Vin
9	NC	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
24	NC	NC
1	Remote control on/off	

Note:

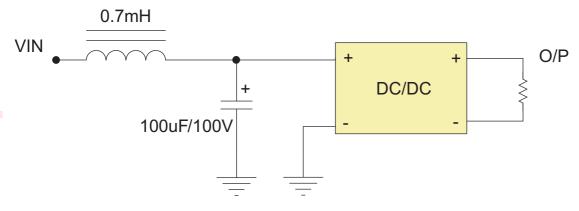
- 1. Dimensions are shown in mm.
- 2. Weight: 18gs.

Recommended Pin Patterns Bottom View (2.54mm / 0.1inch grids)



Tolerance	Millimeters	Inches
	X ±0.25	.XX ±0.01
	XX.XX ±0.25	.XXX ±0.01
Pin	±0.05	±0.002

Emissions Solution: Conducted / ESD / RS / EFT / SURGE / CS / PFMF



Note: This graph meet EN 55022:2006+A1:2007 Class A