DC DC

Part Num

EC6AW SERIES

8 WATT 4:1 INPUT DC-DC CONVERTERS

Features:

- 8W Isolated Output
- Efficiency to 86%
- 4:1 INPUT RANGE
- Regulated Outputs
- Input under-voltage Protection
- Remote ON/OFF
- Continuous Short Circuit Protection
- Without Tantalum Capacitors inside

Electrical Characteristics:

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		%EFF	SIZE
			MIN	MAX	NO LOAD	FULL LOAD		
EC6AW-24S33	9-36 VDC	3.3 VDC	0 mA	2000 mA	10 mA	344 mA	80	DIP-24
EC6AW-24S05	9-36 VDC	5 VDC	0 mA	1600 mA	10 mA	406 mA	82	DIP-24
EC6AW-24S12	9-36 VDC	12 VDC	0 mA	666 mA	10 mA	392 mA	85	DIP-24
EC6AW-24S15	9-36 VDC	15 VDC	0 mA	530 mA	10 mA	390 mA	85	DIP-24
EC6AW-24D05	9-36 VDC	±5 VDC	0 mA	±800mA	10 mA	406 mA	82	DIP-24
EC6AW-24D12	9-36 VDC	±12 VDC	0 mA	±333mA	10 mA	392 mA	85	DIP-24
EC6AW-24D15	9-36 VDC	±15 VDC	0 mA	±265mA	10 mA	390 mA	85	DIP-24
EC6AW-48S33	18-75 VDC	3.3 VDC	0 mA	2000 mA	5 mA	172 mA	80	DIP-24
EC6AW-48S05	18-75 VDC	5 VDC	0 mA	1600 mA	5 mA	201 mA	83	DIP-24
EC6AW-48S12	18-75 VDC	12 VDC	0 mA	666 mA	5 mA	194 mA	86	DIP-24
EC6AW-48S15	18-75 VDC	15 VDC	0 mA	530 mA	5 mA	193 mA	86	DIP-24
EC6AW-48D05	18-75 VDC	±5 VDC	0 mA	±800mA	5 mA	201 mA	83	DIP-24
EC6AW-48D12	18-75 VDC	±12 VDC	0 mA	±333mA	5 mA	194 mA	86	DIP-24
EC6AW-48D15	18-75 VDC	±15 VDC	0 mA	±265mA	5 mA	193 mA	86	DIP-24

NOTE: 1. Nominal Input Voltage 24 or 48 VDC

Specification

INPUT SPECIFICATIONS:

Input Voltage Range.....24V.....9-36V
48V.....18-75V
Input Surge Voltage (100ms max.) ..... 24VDC ..... 50VDC max
48VDC ..... 100VDC max
Under voltage lockout ..... 24Vin power up ..... 8.8V typ
24Vin power down ..... 8.0V typ
48Vin power up ..... 17V typ
48Vin power down ..... 16V typ
Input Filter ..... PI Type
Positive Logic Remote on/off Control : (Note3)
Logic Compatibility ..... CMOS or Open Collector TTL, ref. to -Vin
Module ON ..... >+3.5VDC or Open Circuit
Module OFF ..... <1.2VDC

OUTPUT SPECIFICATIONS:

Voltage Accuracy ..... ±1.5% max
Voltage Balance(Dual) ..... ±2.0% max
Transient Response: 75% ~ 100% Step Load Change.
Error Band .....±5% Vout nominal, Recovery Time .....< 500us
Ripple & Noise, 20MHz BW (Measured with 0.1uF MLCC)
Vo=3.3 & 5V ..... 75mV p-p max
Vo=12 & 15V .... 100mV p-p max
Temperature Coefficient ..... ±0.03%/C max
Short Circuit Protection ..... Continuous
Load Regulation(Note1) ... Single ..... ±0.5% max
Dual ..... ±0.5% max
Load Regulation(Note2) ... Single ..... ±0.5% max
Dual ..... ±1.0% max
Cross Regulation(Dual output) Load cross variation 10%/100%.....±5% max
Over Voltage Protection ..... Zener or TVS Clamp

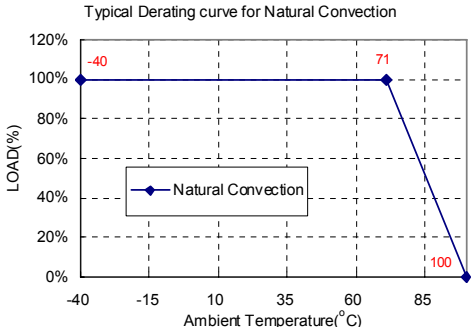
Specification

GENERAL SPECIFICATIONS:

Efficiency.....See Table
Isolation Voltage .....1500VDC min
Isolation Resistance .....10_9 ohm min.
Switching Frequency .....2000KHz typ.
Operating Ambient Temperature Range..... -40˚C to +85˚C
Derating, Above 71˚C .....Linearly to Zero Power at +100˚C
Case Temperature (note 5)..... 100°C max
Cooling.....Natural Convection
Storage Temperature Range .....-55˚C to +125˚C
Dimensions …DIP.....1.25×0.80x0.40 inches(31.8x20.3×10.2mm)
SMD.....1.25×0.80x0.45 inches(31.8x20.3×11.4mm)
Case Material ..... Black Coated Copper with Non-Conductive Base
Weight.....18.4g

NOTE:

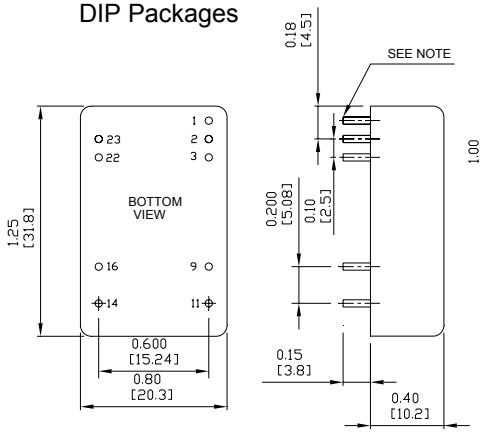
1. Measured From High Line to Low Line
2. Measured From Full Load to min. Load
3. Suffix ”N” to the Model Number with Negative Logic Remote ON/OFF
Module ON ..... <1.2VDC
Module OFF ..... .>+3.5VDC or Open Circuit
4. Suffix ”S” to the Model Number with SMD Package
5. Maximum case temperature under any operating condition should Not be exceeded 100°C



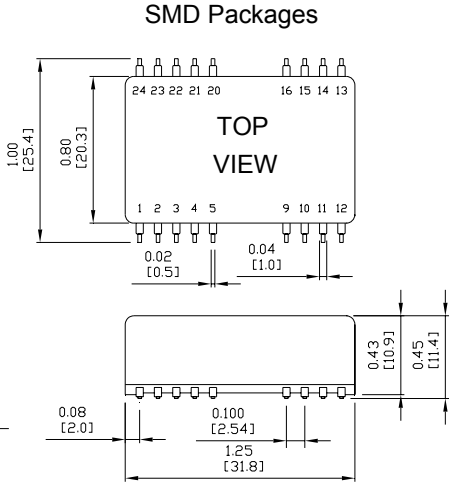
SIZE A Dimensions

NOTE:Pin Size is 0.02"Inch (0.5mm)DIA
All Dimensions In Inches (mm)
Tolerances Inches: X.XX= ±0.02 , X.XXX= ±0.010
Millimeters: X.X= ±0.5 , X.XX=±0.25

DIP Packages



SMD Packages



PIN CONNECTION				
Pin	Single Output		Dual Output	
	DIP	SMD	DIP	SMD
1	Remote on/off	Remote on/off	Remote on/off	Remote on/off
2,3	-V Input		-V Input	
4,5	NP	NC	NP	NC
9	NP	NC	Common	
10	NP	NC	NC	
11	NC		-V Output	
12	NP	NC	NP	NC
13	NP	+V Output	NP	NC
14	+V Output		+V Output	
15	NP	-V Output	NP	NC
16	-V Output		Common	
20,21,24	NP	NC	NP	NC
22,23	+V Input		+V Input	

* NC-NO CONNECTION WITH PIN
* NP-NO PIN

Data sheets are subject to change without notice