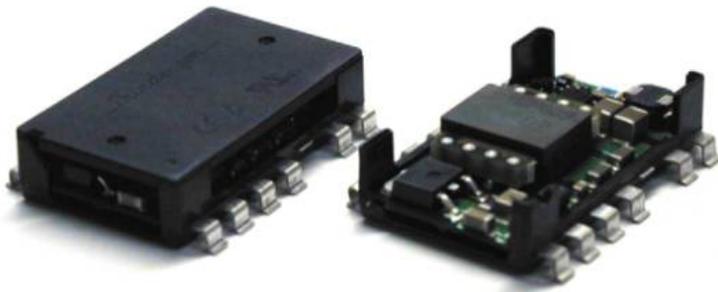


## DESCRIPTION

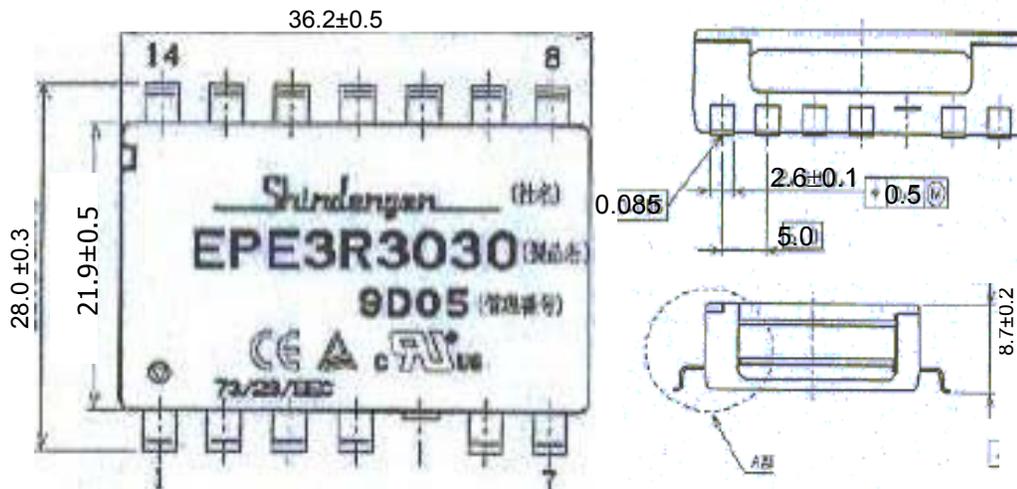
The EcoCell EPE Series is a new line of natural convection, surface mount DC/DC converters for networking applications that have been engineered especially for 48V telecom, networking and datacom applications that require high efficiency and reliability.

## FEATURES

- SMD Type
- Low Profile
- High Reliability
- MTBF > 3.7 Million Hours (at 40°C MIL-STD)
- 1,500V DC Isolation Voltage
- Parallel Operation
- Remote ON/OFF
- CE Marking
- UL1950, CSA950, EN60950
- Alarm Signal
- Low EMI (\*CISPR class B VCCI 2)  
\*With Recommended Circuit
- Meets basic insulation requirements of EN60950



## DIMENSIONS



## PIN ARRANGEMENTS

PIN	Function
1	Vin (-)
2	Vin (+)
3	TEST
4	REMOTE
5	—
6	Vout (-)
7	Vout (+)
8	NC
9	ALM
10	PECout
11	PECin
12	STARTin
13	STARTout
14	OPPS

## EPE SELECTION CHART

Vi	Output(Vo/Io)	Po Max	Ordering No.
36 ~ 75V	5.2V 2.0A	10.4W	EPE 5R2020
	5.0V 2.0A	10W	EPE 5R0020
	3.6V 2.5A	9W	EPE 3R6025
	3.3V 3.0A	9.9W	EPE 3R3030
	2.5V 3.0A	7.5W	EPE 2R5030
	2.1V 3.0A	6.3W	EPE 2R1030
	2.0V 3.0A	6W	EPE 2R0030
	1.8V 3.0A	5.4W	EPE 1R8030
	1.5V 3.5A	5.3W	EPE 1R5035
	1.3V 3.5A	4.6W	EPE 1R3035
	1.2V 3.5A	4.2W	EPE 1R2035

Tentative Spec 02/01/2002

## GENERAL SPECIFICATIONS

### Absolute Maximum Ratings

	Characteristics	Min.	Max.
TS	Storage Temperature	-40°C ~ 125°C	
Ta	Operating Temperature	-40°C ~ 85°C	
Vi	Continuous Input Voltage	0v ~ 75v	
Viso	Isolation Voltage (Input to Output Test Voltage)	1,500v DC	

## ELECTRICAL SPECIFICATIONS

	Characteristics	Min.	Typ.	Max.	Unit
Vi	Input Voltage Range	36	---	75	V
Vi off	Turn-Off Input Voltage	30	32	34	V
Vi on	Turn-On Input Voltage	32	34	36	V
Ci	Input Capacitance	----	1.0	----	μF

## ENVIRONMENTAL CHARACTERISTICS

Characteristics	Test Procedures & Conditions	Notes
Vibration	Frequency Amplitude Number of Cycles	10-55-10Hz 1.5mm 2 min/6hours
Shock (Half Sine)	Shock Duration Number of Cycles Each Axis	50G 5.5msec 3 cycles
Thermal Cycling	Temperature Number of Cycles	-40-125°C 300 cycles
Temperature Humidity Bias	Temperature Humidity Duration	85°C 85% RH 1,000 hours
Solder & Heat	Temperature Solder Duration	260°C 10 sec
Operating Life	Temperature Duration Load	85°C 1,000 hours 100% (Io Max)

JIS C7021  
EIAJ ED4071