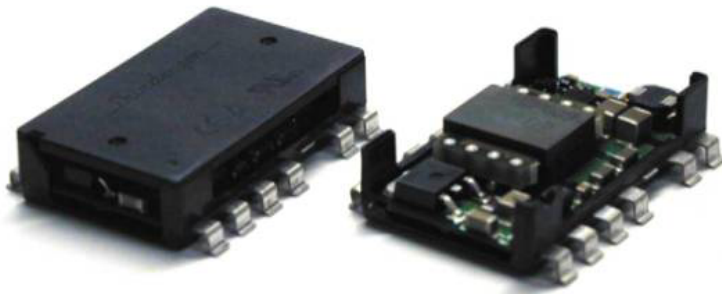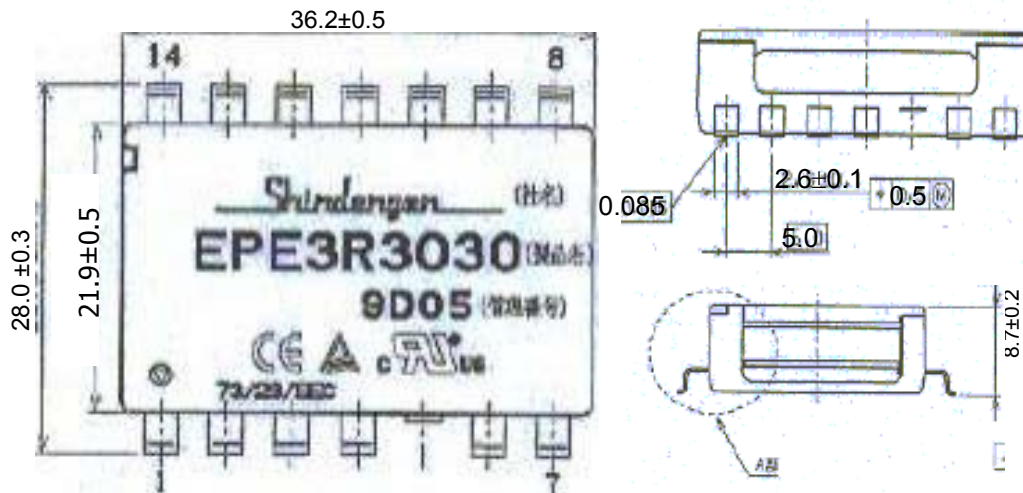## DESCRIPTION

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

36.2±0.5

28.0 ±0.3

21.9±0.5

0.085

2.6±0.1

0.5

5.0

8.7±0.2

EPE3R3030

9D05

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.
	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
36 ~ 75V	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.
T S	Storage Temperature	Ð40ºC ~ 125ºC	
T a	Operating Temperature	Ð40ºC ~ 85ºC	
V i	Continuous Input Voltage	0v ~ 75v	
V i s o	Isolation Voltage (Input to Output Test Voltage)	1,500v DC	

ELECTRICAL SPECIFICATIONS

	Characteristics	Min.	Typ.	Max.	Unit
V i	Input Voltage Range	36	ÐÐÐ	75	V
V i off	Turn-Off Input Voltage	30	32	34	V
V i on	Turn-On Input Voltage	32	34	36	V
C i	Input Capacitance	ÐÐÐÐ	1.0	ÐÐÐÐ	uF

ENVIRONMENTAL CHARACTERISTICS

Characteristics	Test Procedures & Conditions		Notes
Vibration	Frequency Amplitude Number of Cycles	10~55~10Hz 1.5mm 2 min/6hours	JIS C7021 EIAJ ED4071
Shock (Half Sine)	Shock Duration Number of Cycles Each Axis	50G 5.5msec 3 cycles	
Thermal Cycling	Temperature Number of Cycles	Ð40~125ºC 300 cycles	
Temperature Humidity Bias	Temperature Humidity Duration	85ºC 85% RH 1,000 hours	
Solder & Heat	Temperature Solder Duration	260ºC 10 sec	
Operating Life	Temperature Duration Load	85ºC 1,000 hours 100% (Io Max)	

Tentative Spec 02/01/2002