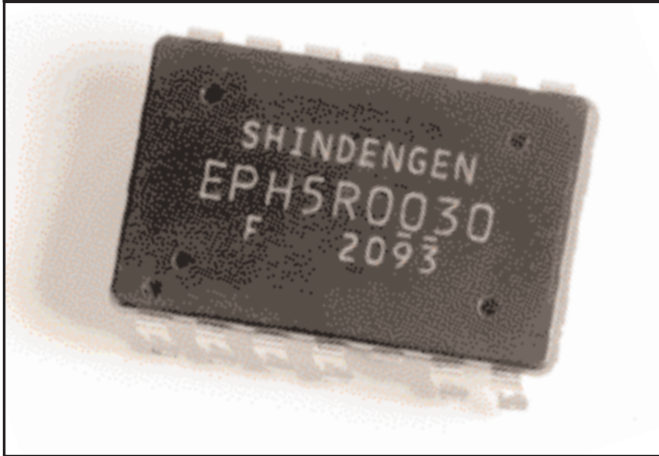




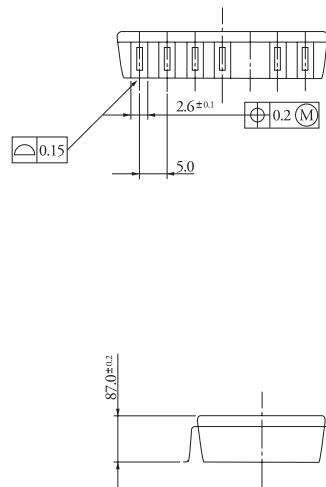
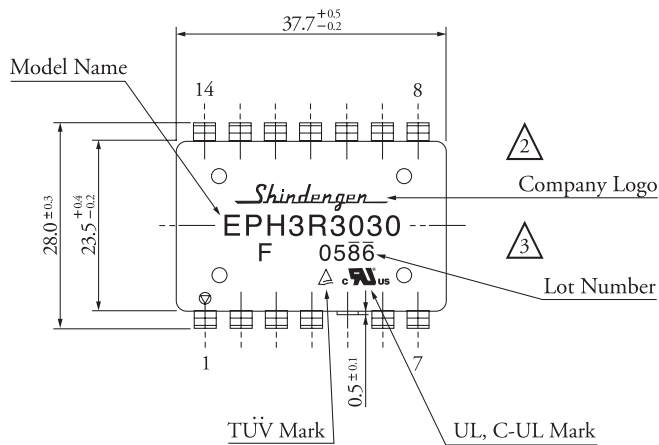
DESCRIPTION

The EcoCell EPH 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

DIMENSION



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

EPH SELECTION CHART

Vi	Output(Vo/Io)	Po Max	Ordering No.
36 ~ 75V	5.2V 2.0A	10W	EPH12R008
	5.2V 2.0A	10W	EPH 5R2020
	5.0V 2.0A	10W	EPH 5R0020
	3.3V 3.0A	10W	EPH 3R3030
	2.5V 3.0A	8W	EPH 2R5030
	2.1V 3.0A	7W	EPH 2R1030
	2.0V 3.0A	6W	EPH2R0030
	1.8V 3.0A	6W	EPH 1R8030
	1.5V 3.5V	6W	EPH 1R5035
	1.3V 3.5A	5W	EPH 1R3035
	1.2V 3.5A	5W	EPH 1R2035

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	0°C ~ 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	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	-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)	