

# TS5

MAX. Power 5W Isolated On-Board Type AC-DC Converter

## TS5 Series Isolated On-Board Type AC-DC Converter



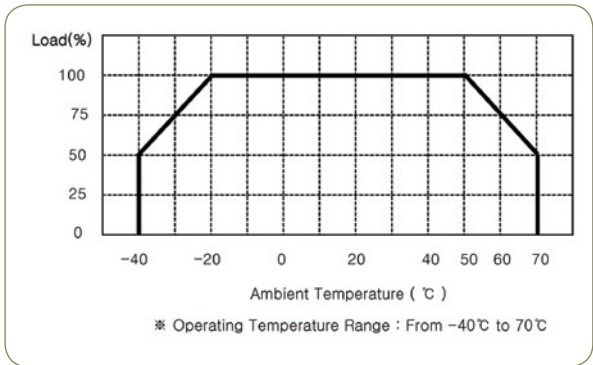
### Features

- Power Saving Mode Operation
- High Efficiency
- Isolated Input - Output
- 115kHz fixed frequency and Current mode Control
- Low output Ripple & Noise
- Built-in over current protection circuit
- Short Circuit Protection
- Universal Input Voltage(Free Voltage)
- Safety standard : CB, CE approved
- RoHS compatible design
- 5-years warranty

### Environment

- Operating Temperature : -40°C ~ 70°C
- Operating Humidity : 20% ~ 90% RH (Non condensing)
- Storage Temperature : -40°C ~ 85°C
- Cooling : Free-Air Convection
- MTBF : 5.0 x 10<sup>5</sup> hrs

### Derating Curve



### Applications

- Data and telecommunication
- Datacommunication electronic equipments
- FA control

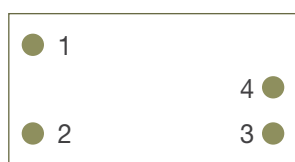
### General Specifications

Input	Power Saving	less than 0.1W (@Input : 230Vac, Output : No Load)
	Voltage Range	AC90V ~ 264V OR DC120V ~ 370V
	Frequency	44 ~ 440Hz(50Hz, 60Hz Typ.)
	Current	0.13Amax.(110Vac), 0.06Amax.(220Vac)
	Efficiency	75% ~ 81%
	Inrush Current	20Amax.(110Vac), 30Amax.(220Vac) @ Cold start
	Leakage Current	0.2mAmax.(110Vac), 0.35mAmax.(220Vac)
Output	Output Voltage	5V, 12V, 15V, 24V
	Line Regulation	± 1.0%
	Load Regulation	± 1.0%
	Output Voltage Accuracy	± 2.0%
	Ripple & Noise	1%(Peak to Peak) Max.
Protection Circuit	Over Current Protection	Works at over 105% of rating and recovers automatically
	Short circuit Protection	
Electrically Isolated	Input - Output	AC3kV, 1minute / DC500V, 100MΩ(min.)

### TS5 Series Ordering Information (Single Output)

MODEL	TS5 - 05	TS5 - 12	TS5 - 15	TS5 - 24	
Input Voltage (V)	AC90V ~ 264V, 44Hz ~ 440Hz or DC120V ~ 370V				
Power Saving	less than 0.1W (@Input : 230Vac, Output : No Load)				
Output	Vout (V)	5	12	15	24
	Iout (A)	1	0.42	0.34	0.21
Maximum Power (W)	5	5.04	5.1	5.04	
Ripple & Noise (mVp-p)	50	120	150	200	
Efficiency Typ. (%)	75	78	79	81	

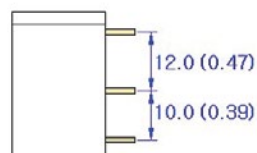
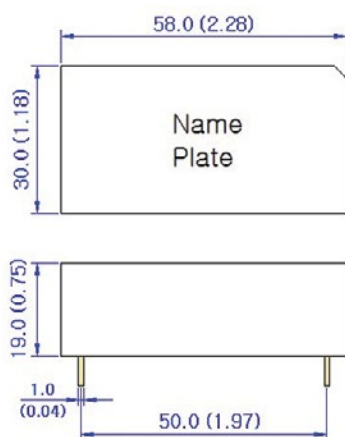
### Pin assignments



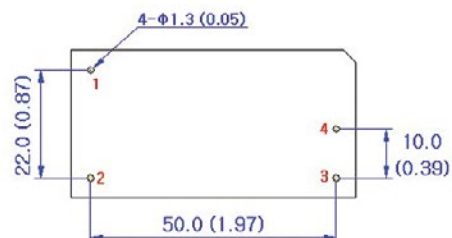
| Top View |

Pin No.	Single
1	AC input N
2	AC input L
3	+ Vout
4	- Vout

### Outline Dimensions : <Unit : mm (inch)>



| Mounting Hole (Top View) |



#### NOTE

1. Unit : mm (inch)
2. Weight : 50g(Max.)
3. Material : PBT