

Guangzhou Top Power Electronics Technology Co., Ltd.

Menu

- Encapsulated power converters ranging 0.1W to 400W (SIP/DIP/SMD)
- Thousands of DC/DC & AC/DC converters with 100 series
- Various inputs and outputs for different application
- Talent R&D team with more than 10 years experience
- Automated production line and skillful workmen
- RoHS compliant and SGS, CE approval
- ISO9001:2015&IATF16949: 2016 certified manufacturer
- Found in 2010























Products introduction

Core advantage

1.11 Company profile. Product range.

R&D、Manufacturing、Marketing

*Main products



Converter modules (SMD/SIP/DIP)

■ DC-DC: 0.1 - 400W

■ AC-DC: 1 - 30W































1.2 Company profile. Patents.



Company profile. Service Networks.





Company profile. Product Application.













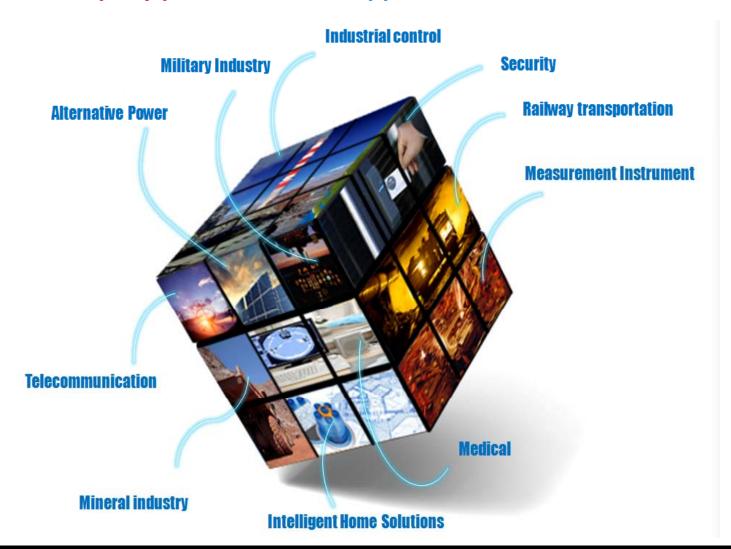








Company profile. Product Application.



What we do

- 01. Electricity
- **02.** Alternative Power
- 03. Industrial control
- **04.** Measurement Instrument
- 05. Railway transportation
- **06.** Telecommunication
- **O7. Security**
- 08. Medical
- 09. Military Industry
- 10. Mineral industry

Menu

Company profile

Products introduction

Core advantage























Product category. Micro power modules.

*Main products

DC-DC converters

isolated (SIP/DIP/SMD)

0.1-3W

4 - 400W

non-isolated (SIP)

0.75-24W

AC-DC converters

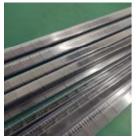
isolated 1-30W (SIP/DIP)

Packing type:

1. REEL packing (SMD 500pcs)



2. Tubes packing
(SMD, SIP, DIP)

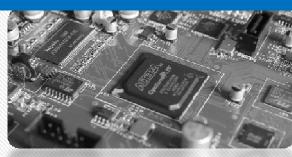


3. Box with foam (SIP/DIP)





Products



DC-DC CONVERTERS
AC-DC CONVERTERS



Product category. DC-DC converter 0.1-3W. DIP/SIP



> Isolation voltage: 1KV, 3K, 6K, 10KVDC

> Single output, dual bipolar output,

Power(W): 0.1-3W

Input(VDC): 3.3V-72V

Output(VDC): $3.3V^{48V} / \pm 3.3V^{\pm}24V$

-48 ~ -72V

operation

2.1.1

temperature: -40°C ~ 105°C

packaging: DIP / SIP

case material: Plastic(UL94-V0)

dual isolated output ,Triple output

➤ Unregulated ,2:1 & 4:1 wide input range

> Low Ripple & Noise

High efficiency ,high reliability

> The world's smallest DC-DC module:

DIP:11.50*9.8*5.46

SIP:11.48*6.00*7.46 mm

Products



Main part series

Unregulated parts:

1W: TKA,TKE,TPA,TPE, TPJ, TPV,TPR-1W, TPG, TPK

Regulated parts:

1W: TPB-1W,TPF, TPI,TPV-SAR

2W: TPB

2:1 Wide input parts:

SIP: TP2L-1W, TP2L, TP2L-3W,

DIP: TPD-3W

10KV isolated :TPS

Triple output: TPT



2.1.2 Product category. DC-DC converter 4-400W. DIP



Power (A): 4-40W

isolated voltage: 1.5KVDC

Output type: Single / Dual

Input (VDC): 5V-72V

output (VDC): $3.3V^224V$

Operation temperature:

 $-40^{\rm o}$ C $^{\sim}$ 85 $^{\rm o}$ C

Packaging: DIP

case material: Plastic(UL94-V0)/ metal

> Isolated: 1.5KV (3KV optional)

> Single /Dual output

> 2:1 & 4:1 wide input

> Shielded metal or plastic (UL 94V-0)

> International industry-standard footprints

> Low Ripple & Noise, miniature size,

> High efficiency ,high reliability

Products



Main part series

Size:25.4*25.4*11.75mmTP03DB,TP05DB,TP06DB,TP10DB,TP15DB

Size:31.75*20.32*10.65mm
TP03DA ,TP04DA ,TP05DA ,TP06DA
TP08DA

Size:50.8*25.4*12.2mmTP10DC ,TP15DC ,TP20DC ,TP30DC
TP40DC,TP50DC

Size:50.8*40.6*11.2mm TP20DD

Size:50.8*50.8*13.3mmTP25DG ,TP30DG ,TP40DG,TP50DG

Others:

TP50DH,TP100DH,TP300DF,TP400DF

2.1.3 Product category. DC-DC converter 0.25-2W . SMD



Power(W): 0.25-2W

Input(VDC): 3.3V-24V

Output(VDC): $3.3V^15V / \pm 3.3V^2 \pm 15V$

Operation

-40°C ~ 105°C/125°C

temperature:

packaging: SMD

certificates: ROHS CE

case material: Plastic(UL94-V0)

➤ Packaging : SMD

➤ Isolated voltage : 3KV

►Input voltage: 3.3V,5V,9V,12V,15V,24V

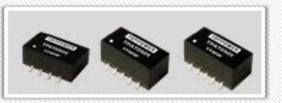
> Single /dual output

> High efficiency , high power density

Miniature size, Good flatness

Qualified for high temperature requested by lead-free reflow solder processes and suitable for automated assembly machine

Products



Case size:

13.7*8*7mm

16.24*8*7mm

16.3*8*7mm

Main part series

0.25W

TPET-W2, TPAT-W2, TPVT-W2

0.5W

TPET-W5, TPAT-W5, TPVT-W5

1W

TPET, TPAT, TPAT-A, TPVT

2W

TPET-2W, TPAT-2W, TPVT-2W

Product category. Non-isolated DC-DC converter 0.5A-2A. SIP



Output current: 0.5 - 2A

isolated voltage: 0 (non-isolated)

Output type:

Single

Input (VDC):

12V, 24V

Output (VDC):

1.5V, 1.8V, 2.5V, 3.3V, 5V,

6. 5V, 9V, 12V, 15V

operation temperature:

 -40° C \sim 105° C

Packaging:

SIP

case material:

Plastic(UL94-V0)

- > Efficiency up to 96%
- > Single output
- **≻**Super wide input range:

12V(4.75-26V); 24V(18-32V) ,etc.

- **≻**Miniature size
- **≻Short-circuit protection**
- **▶**Thermal shutdown protection
- >No external heat-sink required

Products



Case size:

10.2*11.6*7.5mm

17.5*11.5*9mm

Main part series

0.5A: TP78XX-0.5

1A: TP78XX-1

TP78LXX-1

1.5A: TP78LXX-1.5

TP78XX-2.0 2A:

2.1.5 Product category. AC-DC converter 1-30W . DIP/SIP



For both AC input and DC input application

➤ Isolated voltage: 2.5KVAC / 3KVAC/4KVAC

➤ Single /dual /Triple output

> 2:1 & 4:1 wide output range:

165 ~ 265V, 85 ~ 265V

> Overcurrent protection circuit,

> filter circuit, rectifier filter circuit

>Output short circuit, overload protection

> Internal overheat protection

> miniature size

➤ No external heat-sink required

Power(W):

3-30W

Isolated voltage:

2.5KVAC /3KVAC/4KVAC

Output type:

Single /dual /Triple output

Input(VDC):

85V-265V

Output(VDC):

3.3V~24V / ±5V~±24V

operation

temperature:

-40°C ~ 70°C

Packaging:

SIP DIP

case material:

al: Plastic (UL 94V-0)

Products



Main part series

DIP

1-2W: TP01AZ TP02AZ

3W: TP03AC,TP03AA, TP03AR

5W: TP05AC, TP05AR, TP05AS

10W: TP10AC ,TP10AS, TP10AT

15W: TP15AC,TP15AT TP15AS

20-30W: TP20AC, TP20AU

TP25AU~30AU

SIP

2-3W: TP03AL 3-5W: TP05AL



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Core advantage

















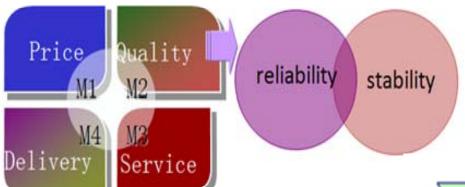






Core advantage







Why with us

- 01. R&D
- 02. Raw materials
- 03. **Production Process**
- 04. **Production equipment**
- 5. Testing and inspection
- 06. Process Control



3.1 Core advantage . Competitiveness . Design

[Professional R&D Team]

*R & D team is expert-level people,
Has been in the micro-power power module industry for more than 20 years

*good at the power converters module and master the core technology products

[Mature design and products]

- *Mature products: after decades of validation and optimization of Technology, product is mature with stable and reliable quality.
- *A variety of products: With more than 100 series, thousands of mature and stable products to choose from, customers is very easy to find the necessary products

Why with us

- 01. R&D
- 02. Raw materials
- 03. **Production Process**
- 04. Production equipment
- 05. Testing and inspection
- 06. Process Control

R&D

- 01. Talent R&D team
- 02. More than 12 years experience

3.2 Core advantage . Competitiveness . Raw materials

International famous brands(Euro/America) Good indicators, high precision Stable and reliable long life Temperature:-55—150°C Quality level: AEC Q100(SMD)

- *Materials purchase directly from the manufacturer or the original authorized agent of the international brands.
- *New suppliers must undergo product certification and supplier survey evaluation certification, and after one year after the trial as a qualified supplier.
- *All suppliers need to do Performance evaluation, procurement and performance appraisal

Why with us

- 01. R&D
- 02. Raw materials
- **O3.** Production Process
- 04. Production equipment
- 05. Testing and inspection
- 06 Process Control

Why with us

ROHS AND SUPPLIER MANAGEMENT

ROHS

- A, ROHS management
 - 1, SGS report
 - 2, <u>ROHS</u> statement
- B, production line
 - 1, ROHS controlled,
 - 2, SMD: Lead-free soldering

SUPPLIER

- **C**, Supplier management
 - 1, product certificated
 - 2. Supplier audit certificated
- D. Sign Agreement
 - 1. Quality assurance and traceability agreements
 - 2, PCN agreement

01. R&D

- **02.** RAW MATERIALS
- **03.** PRODUCTION FLOW
- **04.** PRODUCTION MACHINE
- **05.** TEST&INSPECTION
- **06** PROCESS CONTROL

3.4

Core advantage . Competitiveness . Production flow

[In-Process/Outgoing Quality Control] Auto reflow soldering QC SMD Assemble QC QC Testing i OK Assemble and fill the Initial Isolation 11000 epoxy potting resistance test OK OK NG Repair ATE terminal Marking QA station test NG OK Final inspection Discard And package

- > Automated production equipment is used in the production process to ensure product consistency
- > all products passed the initial and final test twice 100% automated testing process to ensure product quality
- > Online real-time monitoring high temperature full load of the burn-in system, simulating the actual application

Why with us

- **01**. R&D
- **02.** RAW MATERIALS
- 03. PRODUCTION FLOW
- **04.** PRODUCTION MACHINE
- **05.** TEST&INSPECTION
- **06** PROCESS CONTROL

FACILITIES

- 01. SMT Production Line
- 02. Automatic Coil Winding Machine
- 03. Spot welding machine
- 04. PCB depaneling machine
- **05**. Automated Testing Systems
- **06. SMD Envelope Machine**
- 07. AOI Testing System
- 08. High/Low Temperature Testing

Core advantage . Competitiveness . Production machine

Spot welding machine	VS	iron
Instantaneous high current principle, no temperature No solder and flux, no residue	√:×	Conventional soldering iron instantaneous high temperature damage to the device Solder and flux, residue, tin splash phenomenon, such as the use of cleaning will cause the coil insulation and plastic damage
The amplifier guarantees the accuracy of the welding	√:×	Welding accuracy is not guaranteed
Easy to operate, high efficiency	2:1	Low efficiency

Why with us

- **01.** R&D
- **02.** RAW MATERIALS
- **03.** PRODUCTION FLOW
- **04.** PRODUCTION MACHINE
- **05**. TEST&INSPECTION
- **06** PROCESS CONTROL





3.6 Core advantage . Competitiveness . Process control

- Curing process: Production process after years of practice, technology norms and curing, each post has matched Operating instructions and other anti-fenditure devices, reduce dependence on people, reduce random quality problems, to ensure that products are not due to personnel changes Fluctuations, to ensure product consistency.
- Process card: Each batch of products have a process card, record the product information and status, each process conditions.
- ➤ Adverse product With different color container storage, re-inspection of defective products after repair, and can be traced back.
- ➤ Instrument calibration required, Ensure correctness, and carry out maintenance on the equipment as required to ensure the equipment In good condition.
- Material Management: Material together with the work order, finished a single material clean-up immediately after the warehouse, to prevent other materials on the misuse of the station.
- **▶ staff training**: The implementation of pre-induction training of production personnel, qualified before induction, and regular training to improve.

Why with us

- **01**. R&D
- **02.** RAW MATERIALS
- **03.** PRODUCTION FLOW
- **04.** PRODUCTION MACHINE
- **05**. TEST&INSPECTION
- **06** PROCESS CONTROL



3.7 Core Advantage . Summary.

Guarantee the quality consistency and stability of the products

R&D: Professional Team, Design Control

Selection of raw materials: International brands, procurement channel control

Equipment: Automated production and test equipment

Production: Strict production processes and production control

Inspection: First inspection, IPQC process inspection, 100% initial test, final test, military

standard zero defect sampling

Strict implementation of PCN: All design, raw materials, process can not be changed

unless the customer requests a change

Cost-effective: International quality, domestic prices

Delivery: Maintains adequate inventory and just-in-time delivery

Conversional product: 3-7days

Un-conversional product: 2-4week

Why with us

Strong Points

01. Superior Quality

02. Competitive Price

03. Fast Delivery

04. Professional Services

3.8 Core Advantage . Summary.

Professional Service

Before -sale

- According to the provision of parameters, recommend the right products, provide recommended circuits and power solutions.
- Free samples for customer testing and verification.
- Technology Exchange

After-sale

- Technical service support: 2 hours response, on-site support, 48 hours to reach the scene
- Problems, whether or not the quality of our products, are immediately responded to help your company with the Department Management and solution.
- Technical support after sales
- Technology Exchange

Why with us

Strong Points

- 01. Superior Quality
- **02.** Competitive Price
- 03. Fast Delivery
- 04. Professional Services



Select "TOPPOWER" , Select "High quality power converters" Thanks

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Customers reference:



Strategic Partners:

