

CYG Wayon Profile

CYGWAYEN Let's make electronics safer!

Company

Product

Wayon applies its cutting-edge technology, innovative engineering, and years of expertise to the design and manufacture:

- ✓ Polymer PTC
- ✓ Ceramic PTC
- ✓ SMD Fuse
- √ Thermal Fuse
- ✓ TVS
- √ Thyristor
- ✓ PESD
- ✓ PCM (Protect Circuit Module)
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Key Figures

Founded: 1996

Registered capital: US \$ 8.2million

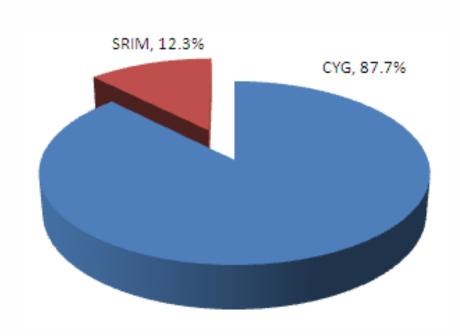
Annual sales in 2012: US \$ 55million

Employees: 1000

Subsidiary companies: 3



Shareholders



CYG (www.CYG.com)

Changyuan Group (Stock Code: 600525 SH). The flagship company of Hongkong tycoon Mr. Ka Shing Li's (李嘉诚先生)multinational business. The main products: Heat shrinkable tubing, PPTC, communication accessories.

SRIM (www.srim.com.cn)

Shanghai Research Institute of Materials. A national polytechnic research organization with a large scale and an advanced level for materials engineering and application since its foundation in 1946.

CYGUAYAN Let's make electronics safer!

Company

History

1987 —	Start the Research and developme	nt of Conductive Polymer In SRIM

- 1992 Telecom application at Bell and Huawei.
- 1996 Wayon Company formally registered.
- 1997 Established a share control corporation -- Shanghai Sunon.
- 1998 Awarded as ZTE's vendor
- 2001 Awarded as BYD's vendor.
- 2004 Awarded as SGS and SANYO's vendor.
- 2005 Awarded as SAMSUNG SDI and NEC/TOKIN's vendor.
- 2007 Changyuan (Chinese stock code: 600525) shared main capital.
- 2007— Acquired Shenzhen GoodPoly Electron Co., Ltd.
- 2008 Awarded as LGC and FOXCONN's vendor
- 2009 Awarded as Motorola's vendor
- 2010 Award as Apples and SONY's Vendor
- 2011 Award as Amazon 's Vendor
- 2012 UL CTDP Lab get approval



Manufacturing Locations





Shanghai Airport Plant 50000m²

Shenzhen Plan 5000m²





Intellectual Property

1987 Wayon started to research on polymer PTC.

~Now Wayon has its own intellectual property on PPTC.

Wayon has 67 patents on polymer PTC.

Wayon's Patents on PPTC include raw materials, techniques, equipment, foil and so on.

~Now Wayon has 9 patents on low resistance PPTC.



Certification 1

System Approval:

ISO9001:

2001

ISO14001:

2003

TS16949:

2006

Product Approval:

UL:

E202125

TUV:

R50081929, J50184540,

J50185154, J50185184, R50168788,

RoHS

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Certification 2

UL CTDP Certificate of Laboratory



CERTIFICATE OF PARTICIPATION

Issued by

Underwriters Laboratories Inc.

Shanghai Changyuan Wayon Circuit Protection Co., Ltd

1001 Shiwan Qi Rd, Shanghai, 201202 CHINA

Has been assessed and found to be eligible to participate in Underwriters Laboratories Inc.

Client Test Data Program (CTDP)

DA File: DA1036 Issued: 7/13/2011 Expires: 7/11/2012 Bruce R. Proper

Ban R. Pom

Global Process Owner, Data Acceptance Program



Certification 3

SONY Green Partner Certificate





Advantages

- **✓** Acknowledged innovation leadership
- **✓** Customized product design
- **✓** Fast response:
 - Lead time: 2 5 weeks
 - Sample delivery: ≤ 2 weeks

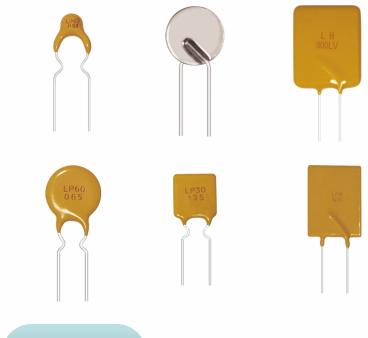


- Power supply
- **HDMI**
- Motors and Wire harness
- **USB** ports
- Linear AC/DC adapters
- **Transformers**

Features

- Radial-leaded devices
- Voltage endurance
- 75V, 60V, 33V, 30V, 16V, 6V
- Rated current up to 14A

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Series

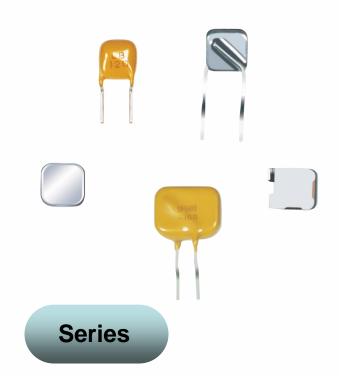
LP75, LP60, LP33, LP30, LP16, LP06



- Customer premise equipment
- MDF modules
- Network Interface Devices
- Base station
- Power supply

Features

- Radial-leaded, SMD devices
- High voltage endurance:
 600V, 265V, 250V, 135V, 99V
- Low resistance and fast trip time
- Compliable with ITUK20.K21.K45.GR1089



LB, LBN, LBR, LBV, LBLV, LM, LMV, LC



Over Current

PPTC



Application

- Electronic control modules
- Automotive small and medium size motors
- Lamp protection, cigarette lighter
- Junction boxes
- Power antennae, window and sunroof
- HVAC and climate control











Features

- SMD type and Radial-leaded type
- Rated voltage: 16 60V
- Rated current: 0.5 15A
- Fast time-to-trip
- Low resistance
- Application ambient operating temperature from -40°C to 125°C

Series

LPH, LA, LP16 – LP60



Over Current

PPTC

Strap / Disc

Application

- NiCd rechargeable battery packs
- NiMH rechargeable battery packs
- Li-ion /Polymer Li-ion battery
- Rechargeable high-power battery packs

LV170





Features

- Strap devices
- Low switching temperature
- Low resistance



LP, LPH, LPCW, LR, LV, DISC



- Li-ion batteries
- Polymer Li-ion batteries
- Mobile phone battery packs
- Cordless phone battery packs
- Camcorder battery packs
- PDA battery packs

Series

LN



Features

- Lower profile PTC device lead a flexible design around battery.
- Lower power consumption by lower resistance increase battery life and extend operation time.



Over Current

PPTC



Application

- Computer motherboards, Modems
- USB hub, ports and peripherals
- IEEE1394 ports, Digital cameras
- Disk drives, CD-ROMs
- Game machines, Battery packs
- Phones, Fax machines
- Analog and digital line cards
- Printers, PDAs, Chargers

Series

- LP-SM ,LP-MSM, LP-USM,
- LP-NSM ,LP-ISM









Features

- Surface mounted devices
- Broadest range of resettable devices available in the industry
- Current rating: 0.05A 4A
- Voltage rating: 6V 60V
- Small footprint
- Low resistance



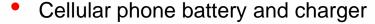
Let's make electronics safer!

Product

Over Current

SMD Fuse





- Printer, Disk Drives
- LCD Monitor, Digital Camera
- MP3 player, LAN cards
- DVD player

Series

- 1206 FA Series
- 0603 FA Series
- 1206 SL Series







Features

- Multilayer monolithic structure with glass ceramic body and silver fusing element
- Silver termination with nickel and pure-tin solder plating
- Provide excellent solderability
- Compatible with both wave and reflow soldering processes
- Current Rating: 0.5A 8 A
- Voltage Rating: 24V 63 V



Over Current

CPTC

Application

- Telecom device protection
- Automobile motor protection
- Power supply
- Industrial control supply
- Motor starting

Features

- Lower residual current
- Higher current endurance
- Higher voltage endurance
- Smaller size









Series

- R-line with coating
- CPTC in ceramic house
- SMD
- Twin CPTC
- Disk



- NiCd rechargeable battery packs
- NiMH rechargeable battery packs
- Li-ion /Polymer Li-ion battery



Features

- Strap devices
- High hold current at high temperature
- Low Pd

Series

WT

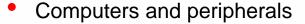
Over Voltage

TVS











- Cellular Phones
- **Digital Cameras**
- PDA, MP3
- Peripherals Cellular Handsets
- Set Top Box
- I/O interface
- **Telecommunication**

Series

WE, WS Series





Ethernet Port ESD Protection

Video Port **ESD** Protection

> **RS232 ESD** Protection

Firewire Port **ESD** Protection

ESD Protection

Cache

Protection

ESD

Features

- Lighting and ESD protection
- Single-line and multi-line protection

USB 2.0 Port

- Small package solutions
- High reliability end product
- RoHS/WEEE compliant



Over Voltage

ESD

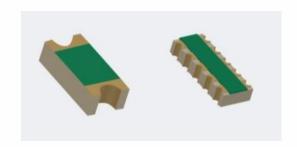


Application

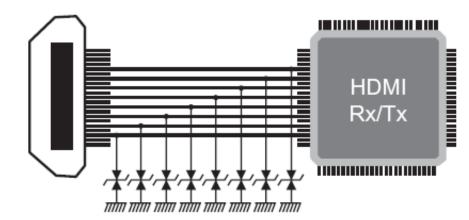
- Cellular phone
- Antennas
- High speed Ethernet
- USB2.0 /3.0 and IEEE1394 interface
- DVI and HDMI interface

Features

- Board space savings
- The best ESD protection for high frequency, low voltage application
- Ultra low capacitance: < 0.1pF
- Very low leakage current: < 1nA
- Fast response time (<1ns) and bidirectional



HDMI Controller



Series

WPESD 0603



Over Voltage

Thyristor

Application

- Customer Premises Equipment CPE
- Digital Transmission Equipment DTE
- Central Office & PBX
- Data Line protection

Features

- Fast response time
- Stable electrical characteristics
- Long term reliability
- Low capacitance

Series

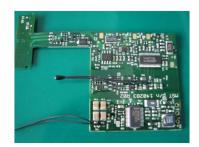
- WEOS1
- WEOS4



- E-bike/Vehicle
- Energy storage
- Electric power tools
- Industrial portable devices
- Consumer electronics: Mobile phone,
 Electric Toy, PC, Video camera, DVD,
 PDA, EV-BMS, etc











THANK YOU!