



THINKING ELECTRONIC INDUSTRIAL CO., LTD.

COMPANY PROFILE

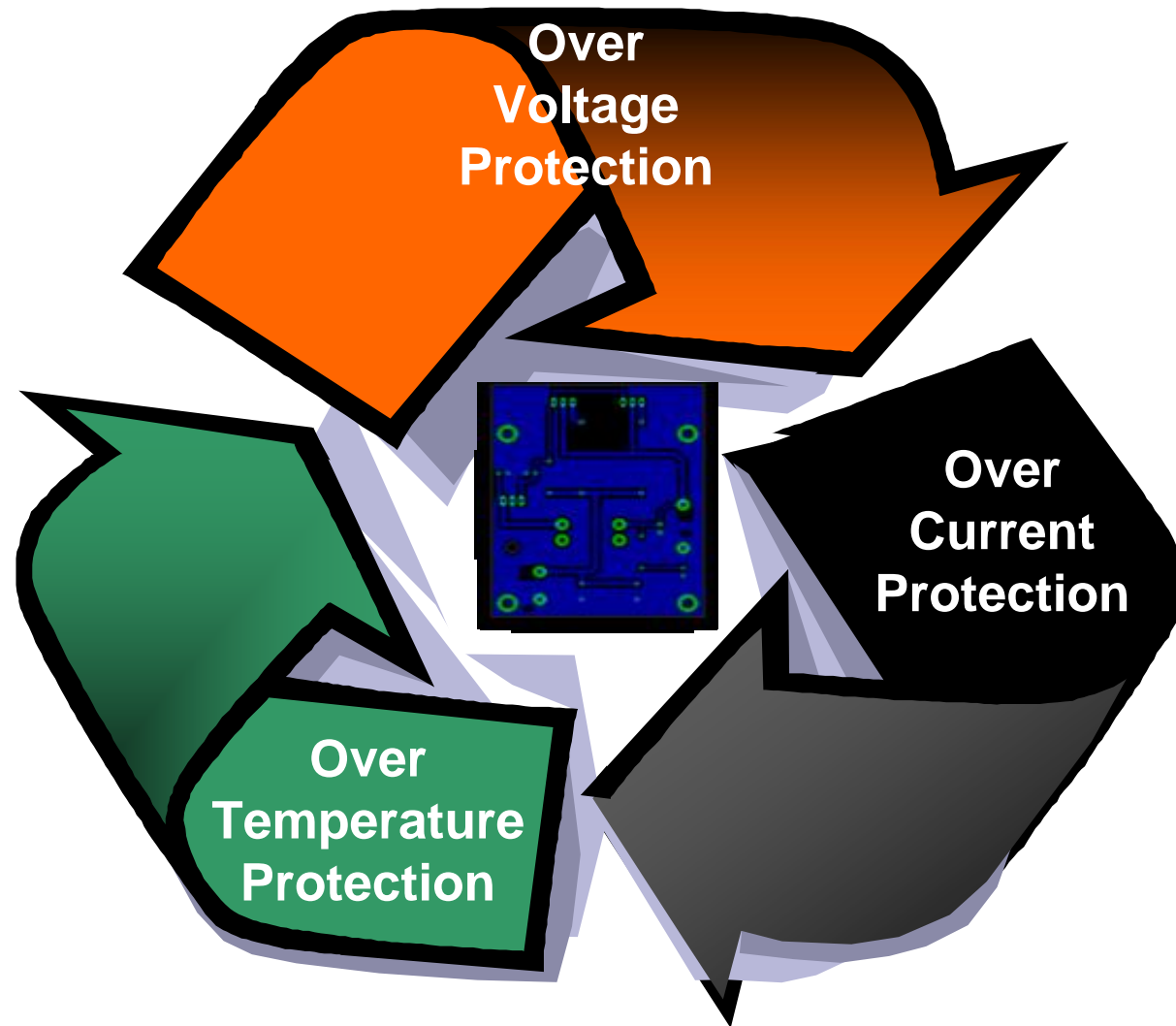
THINKING ELECTRONIC INDUSTRIAL CO., LTD.



June, 2012. English Version

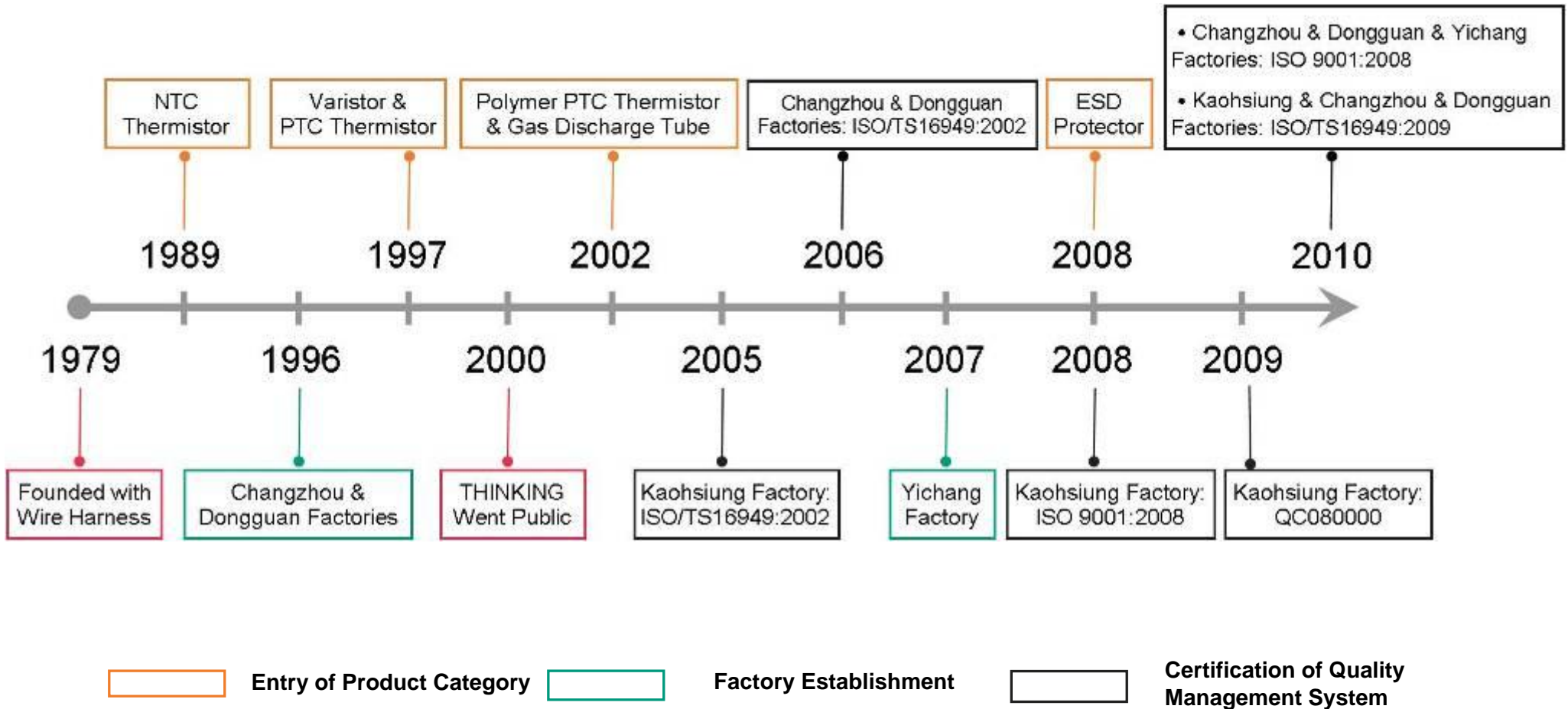


Broad-Line Circuit Protection Solution Provider





Milestone





One THINKING, Five Factories

Yichang Factory



Major Product



Changzhou Factory



Major Product



Jingdezhen Factory



Under Construction

Dongguan Factory



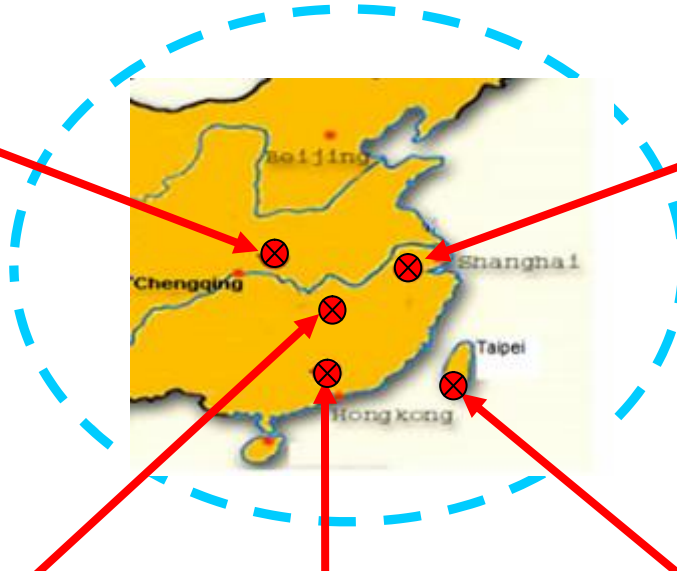
Major Product



Kaohsiung Factory



Major Product





H.Q. and Kaohsiung Factory



1. Location: Kaohsiung, Taiwan
2. Establishment: 1979
3. Registered Capital: US\$ 40 Million
4. Factory scale: 4,800 sq. Meter
5. Employee: 213

6. Main Production:

SMD

- (1) NTC Thermistor
- (2) Varistor
- (3) Ceramic PTC Thermistor
- (4) Low Capacitance ESD Protector

Dongguan Factory



1. Location: Dongguan City, China
2. Establishment: 1996
3. Registered Capital: US\$ 4.06 Million
4. Factory Scale: 14,000 sq. Meter
5. Employee: 1500

6. Main Production

A. Back-End Process:

- (1) NTC Power Thermistor
- (2) NTC Temp. Compensation Thermistor
- (3) Varistor
- (4) Ceramic PTC Thermistor
- (5) Polymer PTC Thermistor

B. Temperature Sensor/Probe Assembly

Changzhou Factory



1. Location: Changzhou City, China
2. Establishment: 1996
3. Registered Capital: US\$ 21.26 Million
4. Factory Scale: 40,000 sq. Meter
5. Employee: 1350

6. Main Production:

- (1) Varistor & Arrestor
- (2) Ceramic PTC Thermistor
- (3) High Accuracy NTC Thermistor
- (4) High Power Rating NTC Thermistor
- (5) High Temp. NTC Sensor
- (6) Polymer PTC Thermistor



Yichang Factory



1. Location: Yichang City, China
2. Establishment: 2007
3. Registered Capital: US\$ 6 Million
4. Plant Area: 14,600 sq. Meter
Land Area: 114,900 sq. Meter
5. Employee: 500

6. Main Production
 - (1) Temperature Sensor/Probe Assembly
 - (2) Arrestor Assembly

Welkin Electronic Industrial Co., Ltd.

1. Location: Pingtung County, Taiwan
2. Establishment: 1992
3. Employee: 31
4. Main Products:
 - Variety of cable and wire harness

Yenyo Technology Co., Ltd.

1. Location: I-Lan County, Taiwan
2. Establishment: 1997
3. Employee: 130
4. Main Products:
 - (1) Glass Passivated Rectifier Wafer
 - (2) Rectifier Finished Devices
(Schottky Barrier Rectifier,
Super Fast Recovery Rectifier, etc.)





Products of THINKING

Broad-Line Solution on Circuit Protective Demand

Over-voltage Protection

- ✓Metal Oxide Varistor
- ✓Gas Discharge Tube
- ✓Low Capacitance ESD Protector

Over-current Protection

- ✓NTC Thermistor
- ✓Ceramic PTC Thermistor
- ✓Polymer PTC Thermistor

Over-temperature Protection

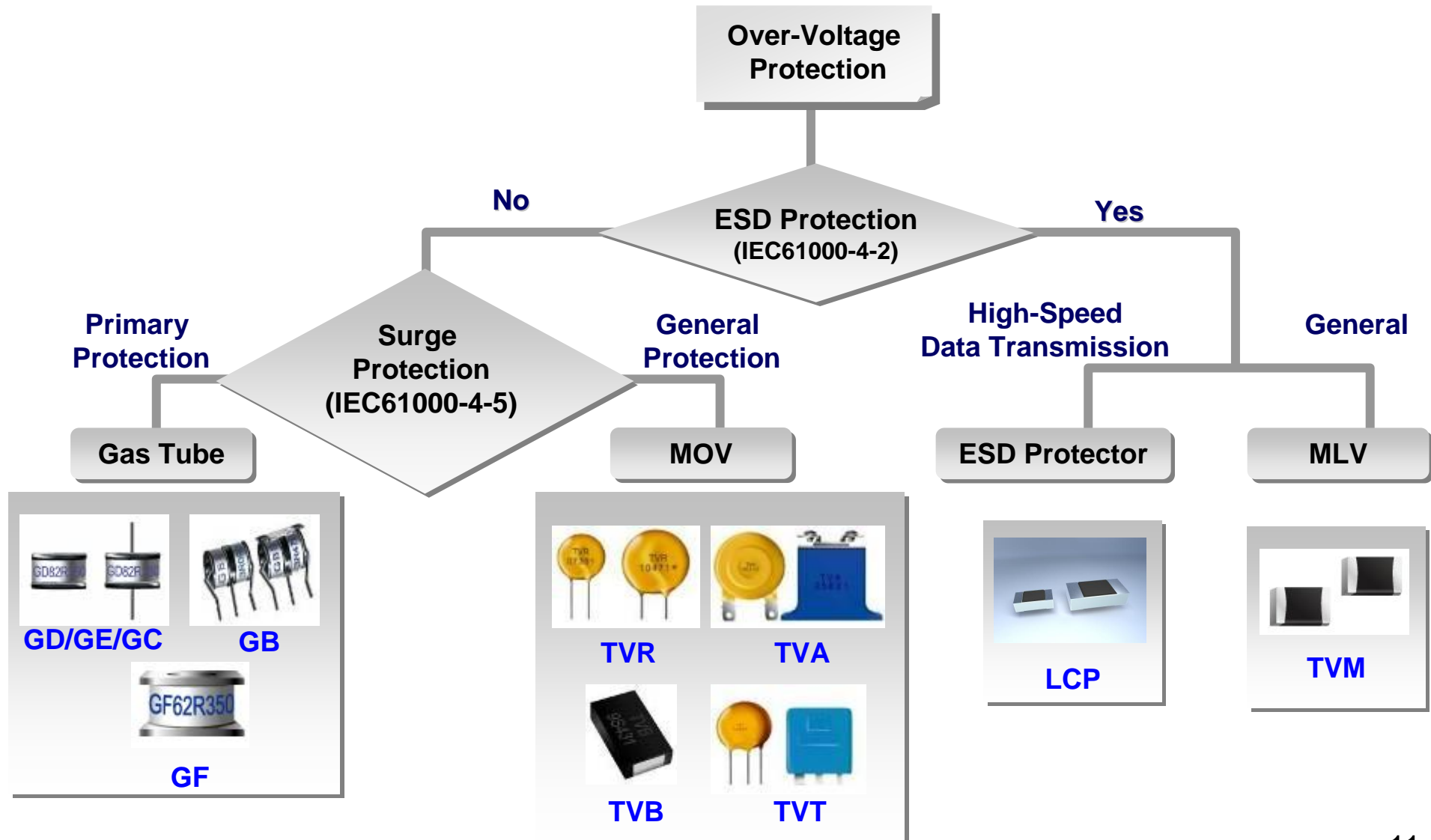
- ✓NTC Thermistor
- ✓Sensor
- ✓Ceramic PTC Thermistor

Applications

- Automobile
- Large home appliance
- Small home appliance
- Consumer electronics
- Industrial system
- Medical
- Telecom
- Computer
- Lighting
- Power supply
- Security product
- Toys
- Surge protection device
- Fan
- Motor
- Panel
- Electronic thermometer,etc.

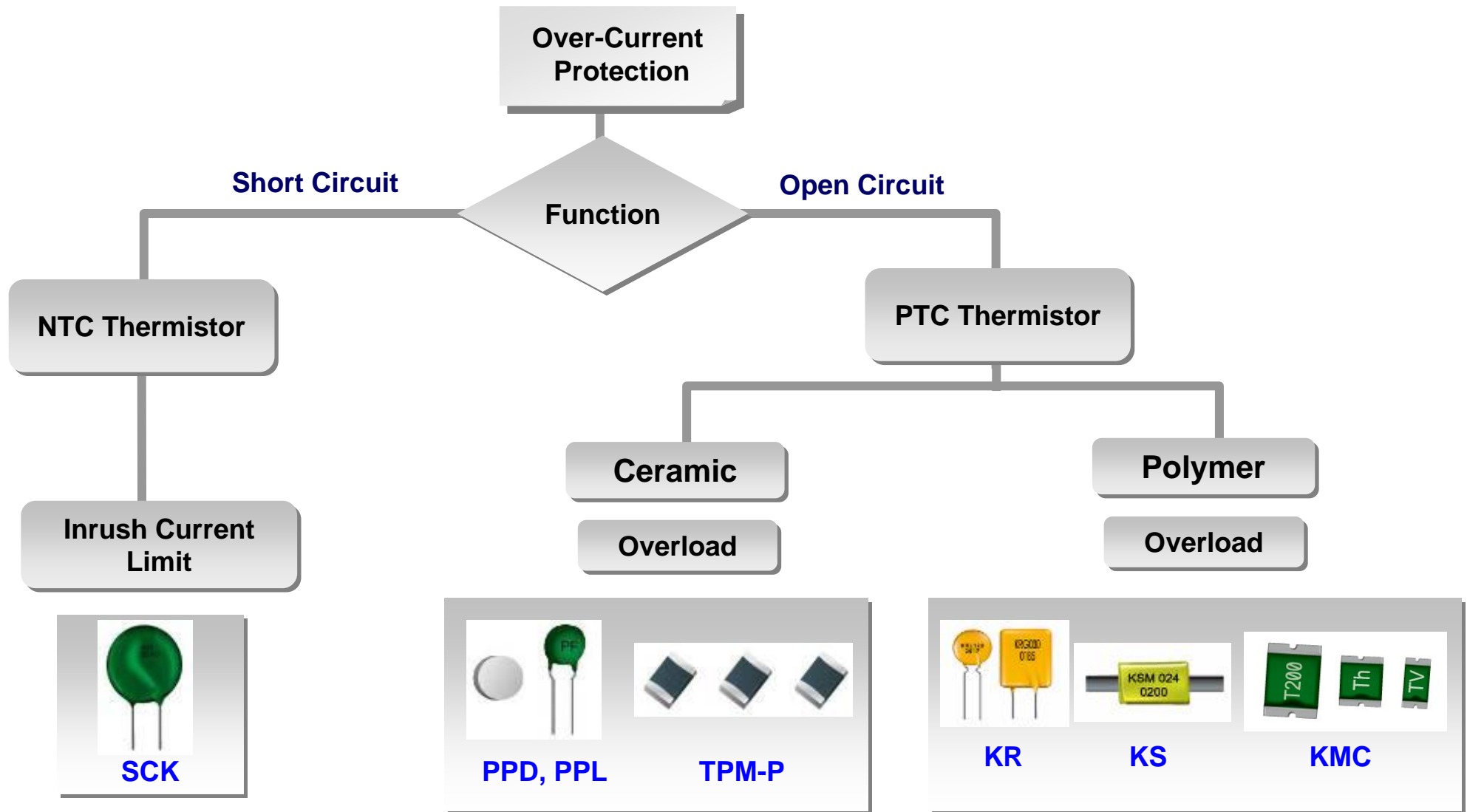


Portfolio for Over-Voltage Protection



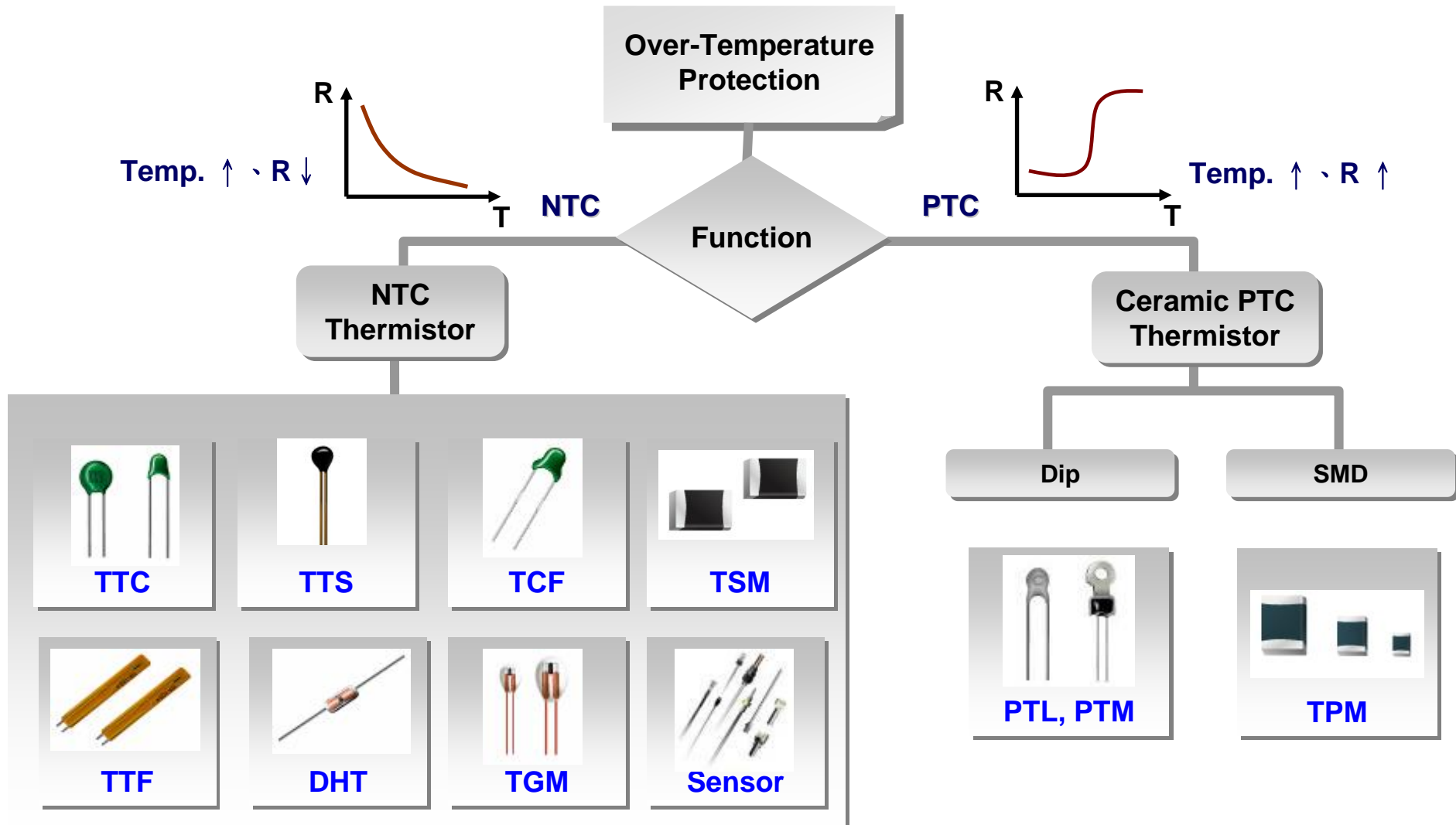


Portfolio for Over-Current Protection

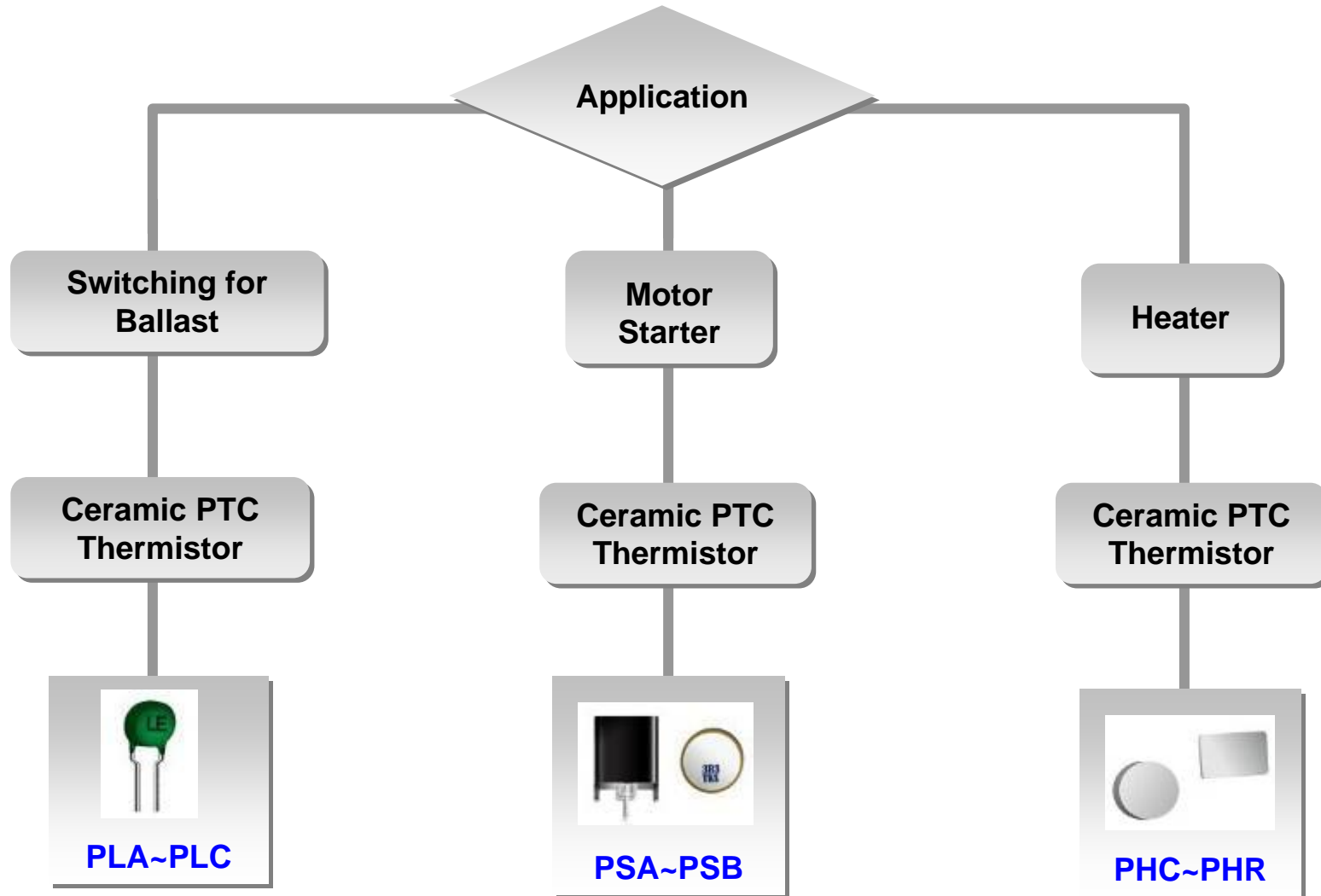




Portfolio for Over-Temperature Protection



Products for Specific Application





Strength of THINKING

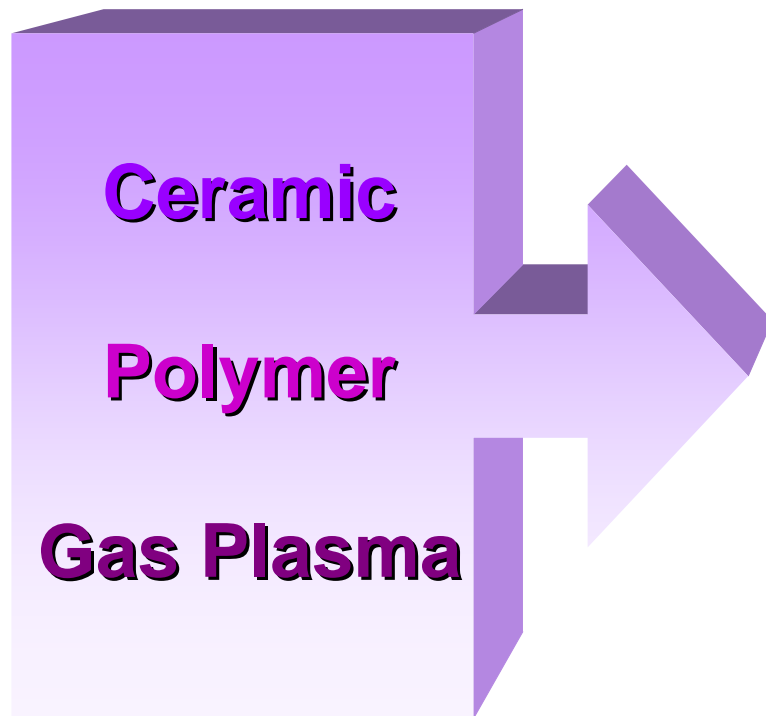
- n Broad-line portfolio for circuit protection
- n Overall QC & international QA systems
- n Products and laboratories certified by reputed safety certification organizations
- n Excellent R&D force meets global industrial trend
- n Manufacturing capability reaches economies of scale



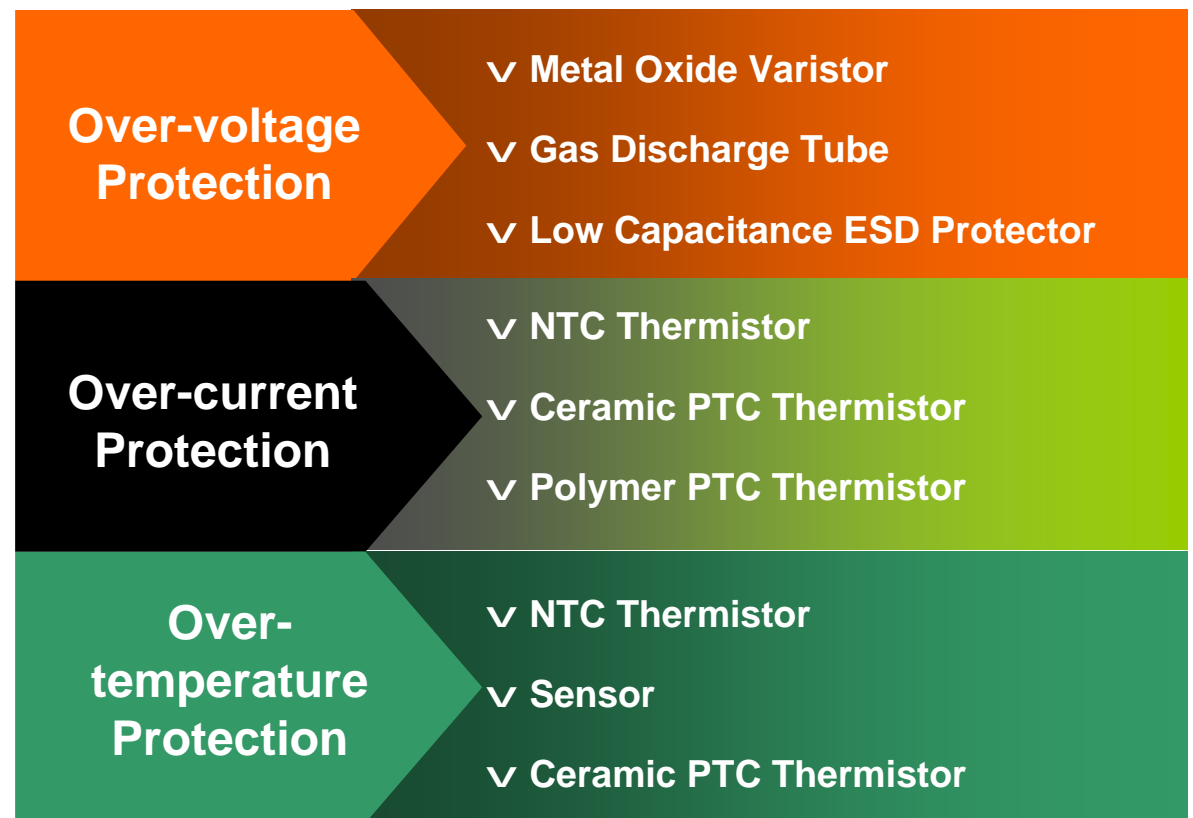
Broad Portfolio for Circuit Protection

Balanced technology & broad portfolio

Technology



Products










Certification of Management System

- **Quality Management System:**
ISO 9001-2008, ISO/TS 16949-2009, QC 080000
- **Health and Safety Management System:**
OHSAS 18001-2007
- **Environmental Management System:**
ISO 14001-2004
ISO 14064-1:2006 (Greenhouse Gas Verification Statement)
PAS 2050:2008 (Product Carbon Footprint Verification Statement /
Verified Product: TSM0402)



Agency Approval of Product

					
NTC Thermistor	●	●		●	●
Varistor	●	●	●		●
Ceramic PTC Thermistor	●		●	●	●
Polymer PTC Thermistor	●			●	
Gas Discharge Tube	●				
NTC Sensor	●		●		

Note:  is for UL + cUL



UL Certified Laboratory

- Reliability laboratory passed the CTDP (Client Test Data Program) qualification of UL.









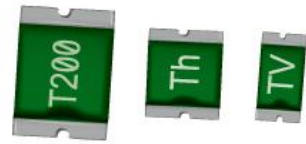
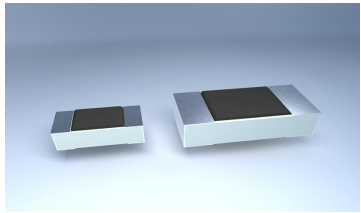




Economies of Scale

- World Class Manufacturing Capacity

Unit: pcs/ month

NTC  140 million	MOV  110 million	Ceramic PTC  30 million	Polymer PTC  20 million	Gas Discharge Tube  10 million
SMD NTC  150 million	MLV  200 million	SMD Ceramic PTC  15 million	SMD Polymer PTC  35 million	ESD Protector  20 million



Performance of THINKING

- n World-wide customer reference
- n Stabilization of business



Major Customers





Major Customers: PC Industry

MONITOR

BENQ
CHANGHONG
CHIMEI
DELTA
LG
LIKOM
SAMSUNG
TATUNG
TPV



PC M.B. & NOTEBOOK

APPLE
ASROCK
ASUS
BIOSTAR
COMPAL
DFI
ELITEGROUP
EPOX
FOXCONN
GIGABYTE
INTEL
INVENTEC
LENOVO
MATIC
MSI
NVIDIA
QUANTA
SAMSUNG
WISTRON





Major Customers: PC Industry

POWER SUPPLY

ABLEREX
ACBEL
ALCATEL NETWORKS
APC
BESTEC POWER
CHICON POWER
CYBERPOWER
DELTA
DVE
EATON
EFORE
EMERSON
FDK
FOXLINK
FSP
FLEXTRIONICS
HUNTKEY



KINPO
LOGITECH
LEVITON
LINEAGE
LITE-ON GROUP
MITSUMI
PANASONIC ENERGY
PHIHONG
PI
SAMSUNG ELECTRO-MECHANICS
SANKEN
SEND
SONY
TABUCHI
TAMURA
TDK-LAMBDA
YOKOGAWA





Major Customers: PC Peripheral & C.E.

DVD PLAYER

BENQ
KONKA
LG
MAGNETEK
SAMSUNG
SHINCO
TATUNG
TCL

TELECOMMUNICATIONS & PDA

ARIMA
ARRIS
ASUS
BENQ
COMPAL
CMCS of FOXCONN
FOXCONN
HISENSE
HTC
MOTOROLA
PEGATRON
QUANTA





Major Customers: Home Appliances

HOME APPLIANCES

ARCELIK

BITRON (Control board)

BSH (Cooking appliance, Washing machine)

CARRIER

DEI

DIEHL CONTROLS (Control board)

DR

ELECTRA

ELECTROLUX (Cooking appliance, Washing machine)

FAGOR BRANDT (Cooking appliance)

GALANZ

GREE

HAIER (Air conditioner)

HITACHI

LG

McQuay

METALFLEX (Door lock)

MIDEA

NETTEK

PANASONIC (Air conditioner, Microwave oven, Motor for refrigerator)

PANASONIC ECO. (Air cleaner, Dehumidizer)

SAMPO

SAMSUNG

SANYO

SEB

SHARP (Microwave oven)

TOSHIBA (Washing machine, Microwave oven, Refrigerator)

VESTEL (Cooking appliance)

WHIRLPOOL (Cooking appliance, Dryer)

YORK





Major Customers: Television

TELEVISION

AUO

BENQ

CMO

DAEWOO

HAIER

HISENSE

CHIMEI

JVC

LG

PHILIPS

SAMSUNG

SHARP

SKYWORTH

SONY

TATUNG

TCL

TECHNICOLOR

TOSHIBA

TPV





Major Customers: SPD& Low Voltage Apparatus

SURGE PROTECTION DEVICE (SPD)

ABB
ARROW
BAISI
CHNT GROUP
CITEL
CPT CIRPROTEC
DELIXI GROUP
LEIAN
KBTE
PEDARO
PUTIAN
SCHNEIDER
ZHONGGUANG

LOW VOLTAGE APPARATUS

ABB
CHNT GROUP
COOPER
DELIXI GROUP
GENERAL PROTECHT GROUP
ELEGRP
HOLLEY
SOLARFUN
SCHNEIDER



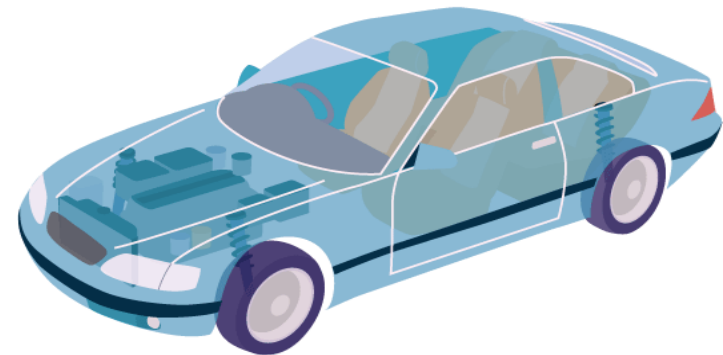
Major Customers: Others

BATTERY PACK

BYD
CELXPRT
CHINATECH
CTECH
CTEK
DYNAPACK
E-ONE
FOXLINK
GLW
KOKA
LICO
MOTOROLA
POWERLINK
SANYO
SIMPLO
SONY
STL
WELLDONE

AUTOMOBILE

DELTA
EBERSPACHER CATEM
GURTNER
IGUACU
J.M.O.
LISHEN
LITEON
MORE
ROSTRA
SHANGHAI AEROSPACE
SIGMAR





Major Customers: Others

LIGHTING

ANTRON
DELTA
MELTONIC
OSRAM
TOA
TOSPO
TRIDONIC
YUIEH HSENE

METER

ACTARIS
AMPY
FUJI
KAMSTRUP
LANDIS&GYR
MITSUBISHI



EARPHONE

FOXLINK
PRIMAX
MERRY
GOERTEK

NETWORK

ARRIES
ALPHA
ASUS
ASKEY
CAMEO
COMPAL BROADBAND
DELTA NETWORKS
GEMTEK
LCENT
NETGEAR
PRO-NETS
SERCOMM
WISTRON NEWEB
ZTE



Major Customers: Others

ABB-Industrial Control
BEHRINGER-Audio
CASIO-Electric Piano
COOPER-Electronics Industry
EBM-Fan
FOSTER-Speaker System
GE-Security Product
GRUNDFOS-Pump
HITACHI-Elevator/Converter for Wind Power
JVC-Printer
KAIN-Thermostat
MITSUBISHI-Motor Controller
OMRON-Industrial Control
PANASONIC-Motor for Refrigerator
POSITEC-Industrial System
REGAL BELOIT-Electric Motor
RICOH-Copy Machine

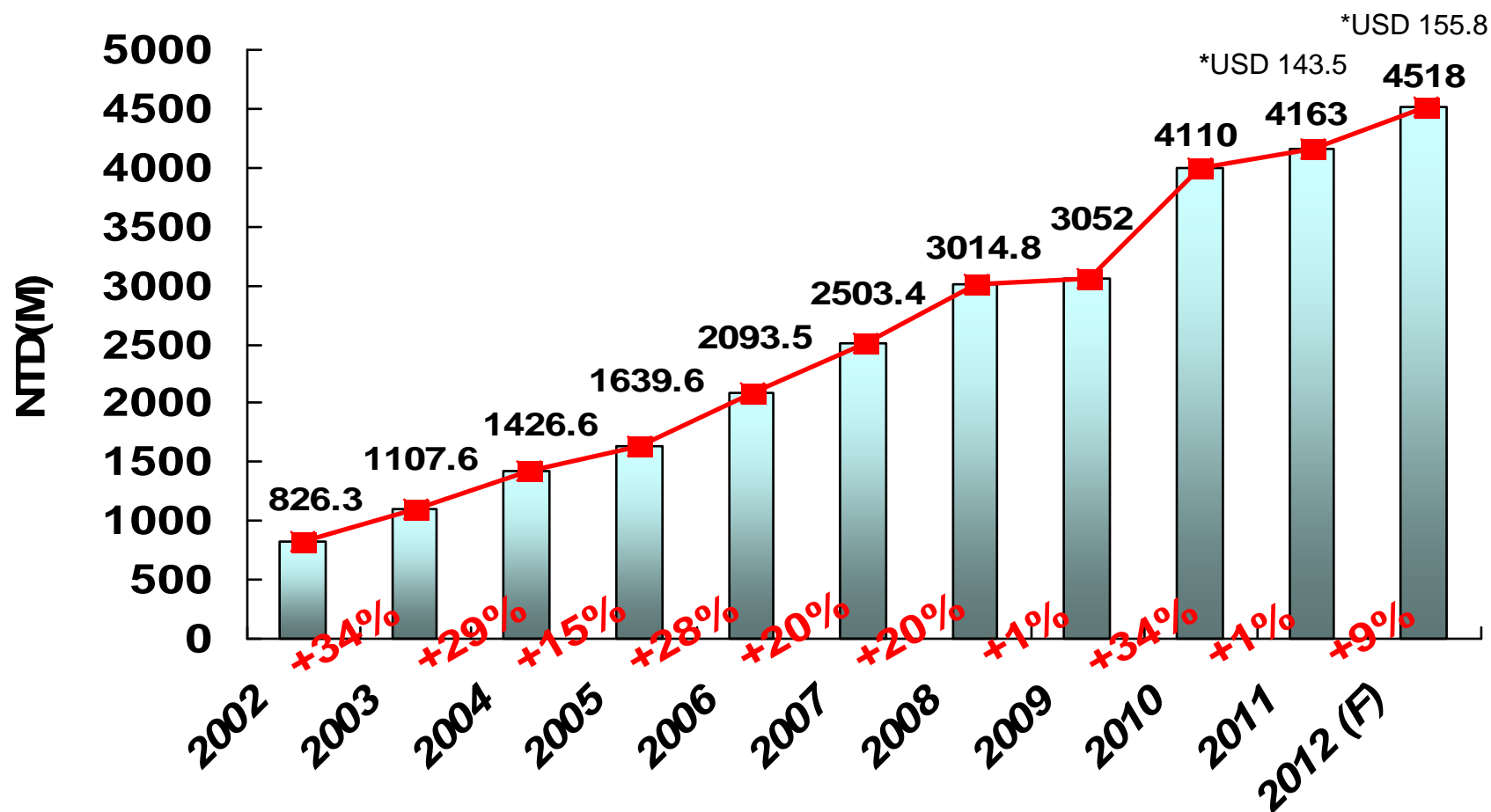
SONY-Digital Camera
SECOM-Security Equipment
SANYO-Tuner/Solar
SIEMENS-Security Product
TOSHIBA-Copy Machine
TSMT-SMT
YAMAHA-Power Amplifier





Financial Performance

I 2002-2012 Net Revenues



* Using an exchange rate of 1 USD = 29 NTD



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