

# NSSEI Electric Co.,Ltd



# CONTENTS

**01**

Company  
Profile

**02**

Product &  
Customer

**03**

Technology

**04**

Corporate  
Objectives

# 01 *Company Profile*

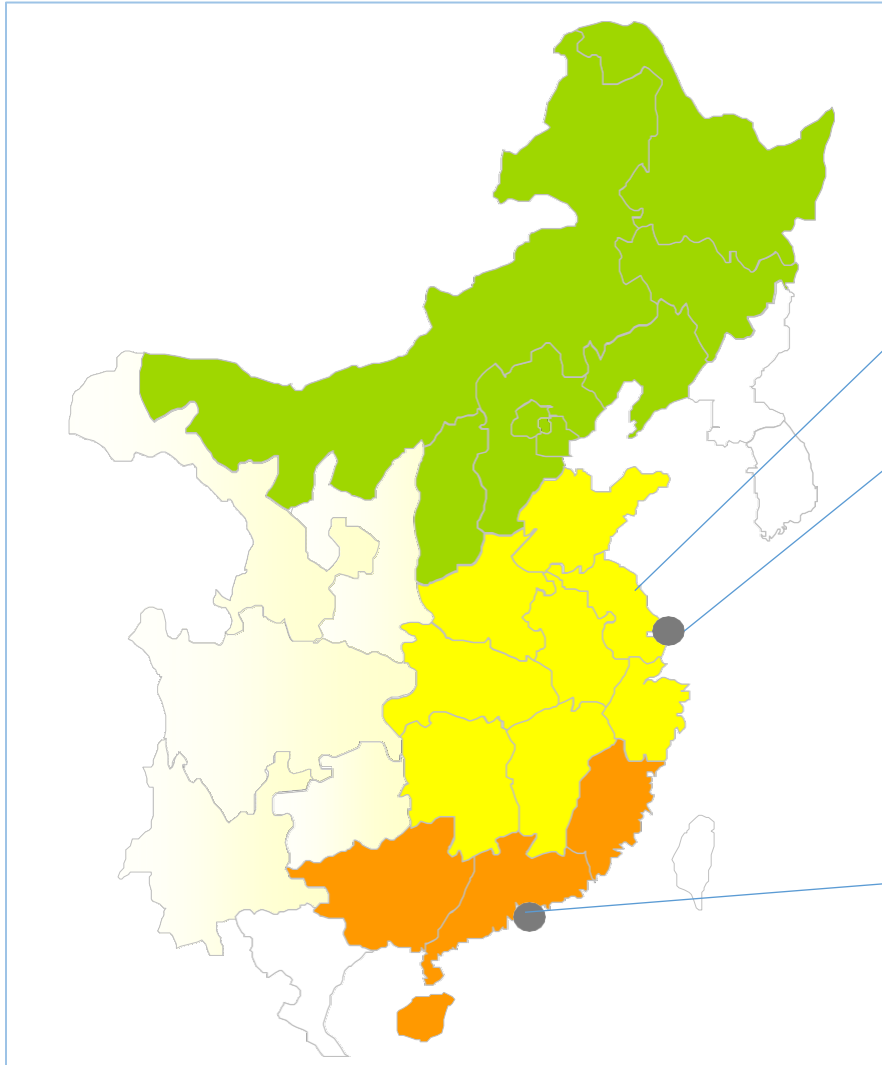


## **NISSEI GROUP**

- **Nissei Electronics**
- **Nissei Electric**

- **Establishment** : 1959
- **Factory** : Japan and China
- **Employees** : 300 in total
- **Sales revenue** : US\$19,000,000 (2018)

# *Factory and Sales office in China*



## **East China :**

- Yangzhou NISSEI Electronics
- Shanghai NISSEI Trading

## **South China :**

- Shenzhen NISSEI Sales office
- NISSEI Electronics Hong Kong

# *Factory and Sales office in Japan*



諏訪湖



中尊寺

Okaya factory

Hanamaki Factory

East Sales office in Tokyo

West Sales office in Kobe



 **History of NISSEI**

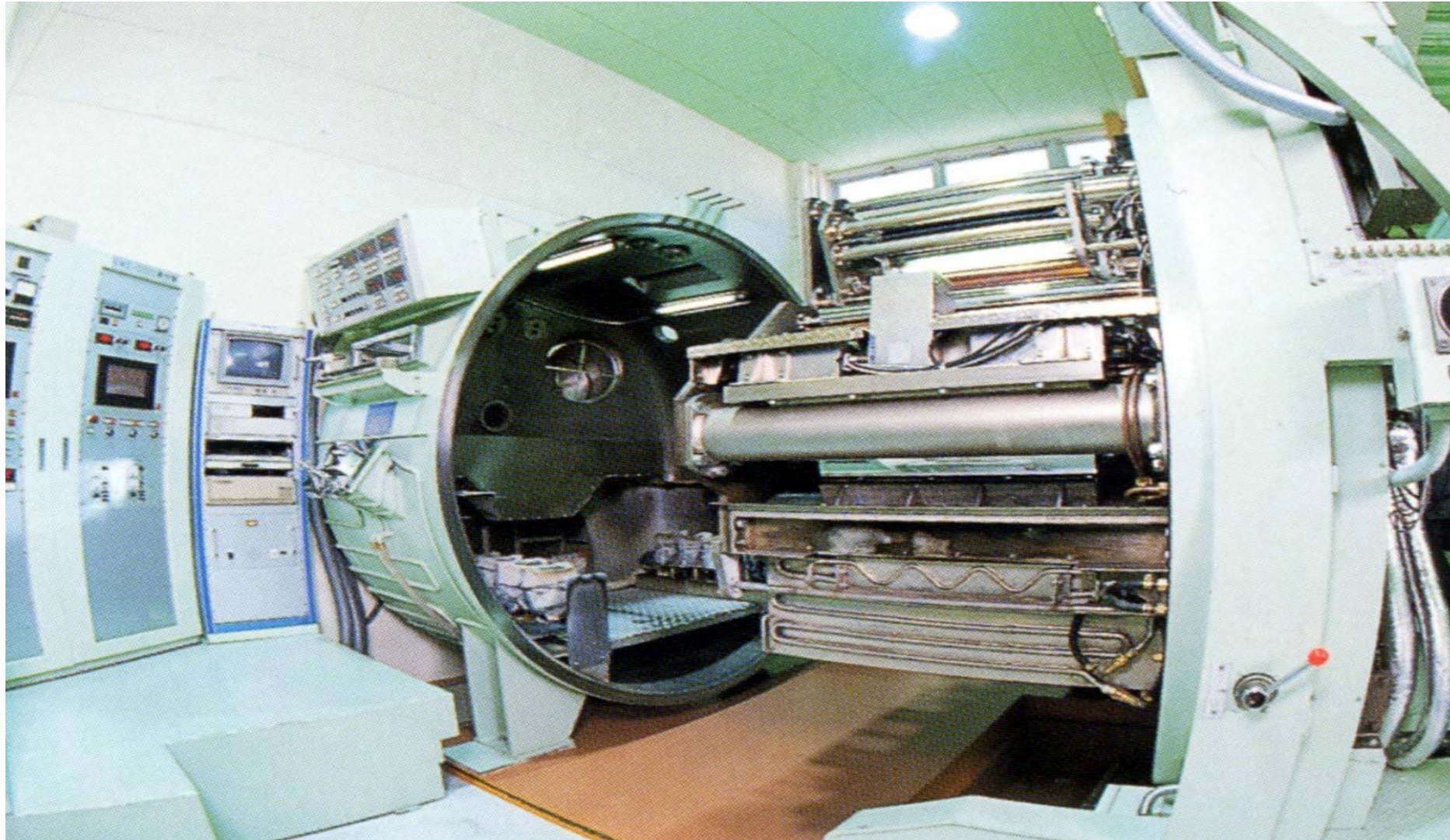
- 1959 Established in Nagano Prefecture, Japan**
- 2008 Operated Yangzhou factory in China**
- 2012 Participated in “electronica” (2014,2016,2018)**
- 2014 Set up a clean energy and automotive department**
- 2016 Obtained IATF16949 in Yangzhou factory in China**
- 2019 Obtaining IATF16949 in Hanamaki factory in Japan**

## ***Strength of NISSEI***

- **Japan quality & China price**
- **2 manufacturing sites to avoid any catastrophic events**
- **60-year experiences for film capacitors**
- **In-house metallization technology for customized film capacitor**
- **Quick development and Quick delivery**
- **Enhanced lineup of AEC-Q200 compliant for automotive industry**
- **IATF16949 for automotive industry**



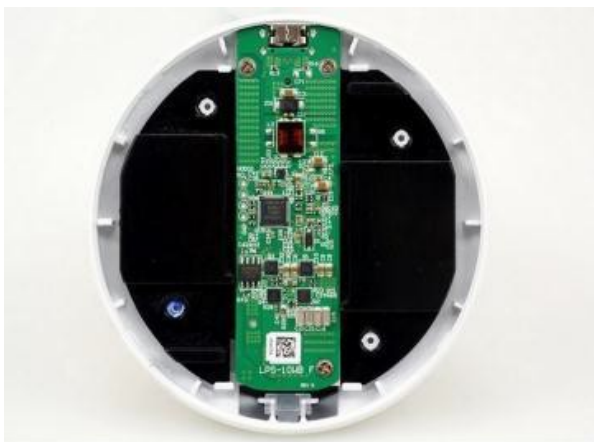
# *Vacuum metallization equipment*



# 02 *Product & Customer*



# Products



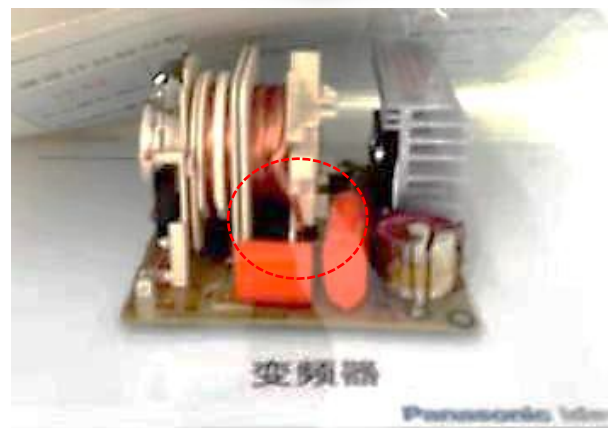
Power Supply



Inverter  
for home appliance



Clean energy &  
Automobile



# *Product Lineup for General application*

**Noise suppression (X2 class)**



*MP1 series*

**PFC circuit (Moisture resistance)**



*MPY series*

**PFC Circuit (Low noise)**



*BPW series*

# Major customers

For general application



# *Product Lineup for Automotive application*

## DCDC Converter



*BPX*



*BMB*



*MPY*

## On Board Charger



*BPC*

## Inverter

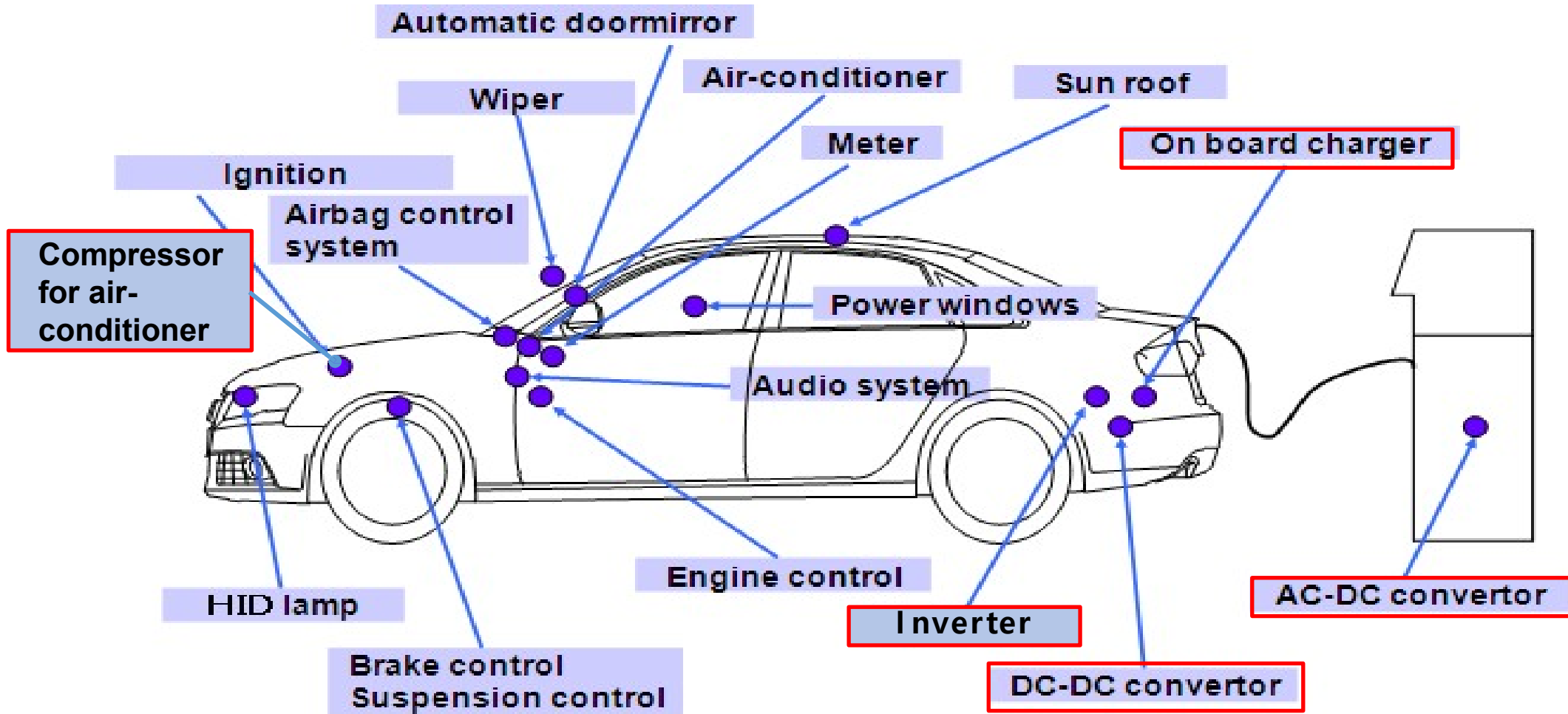


*DLC*



*DLC*

# Application for automobile



# Application for automobile

## Wireless Power Transfer System

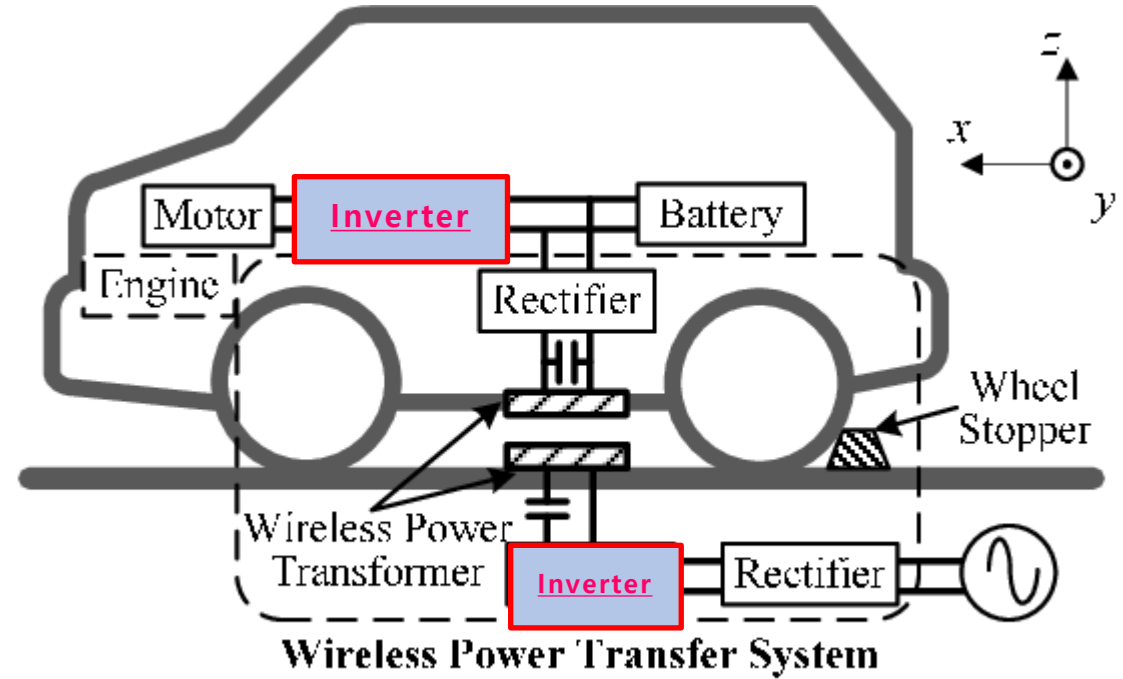


Figure 1. Wireless power transfer system of an EV and PHEV.



# Major customers

For automotive application



**DENSO**



上汽集团  
SAIC MOTOR



北汽新能源  
BAIC BJEV



**HONDA**



HITACHI  
Inspire the Next  
日立



**GCDN**



**NEVS**

For automotive application

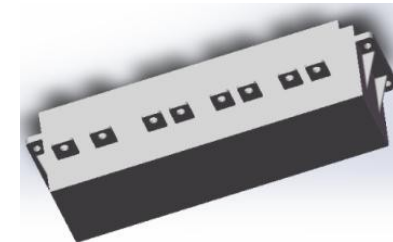
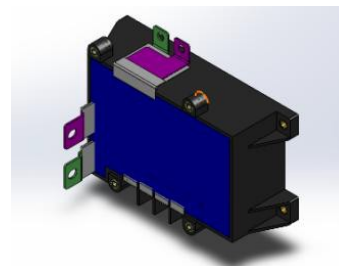
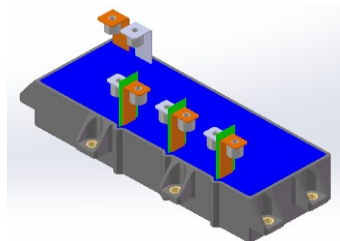
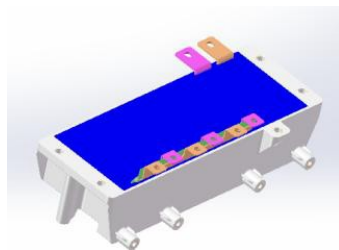
Inverter for EV 5KW~35KW



Inverter for EV 55KW

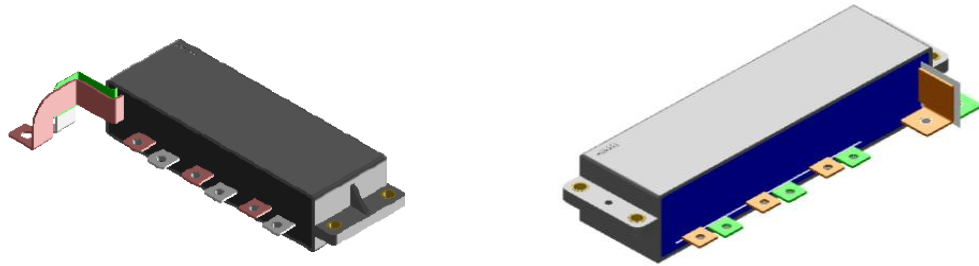


Inverter for EV

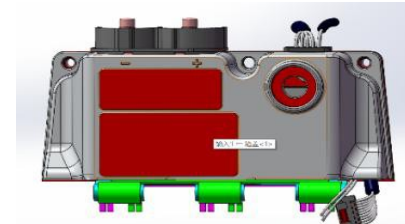


For automotive application

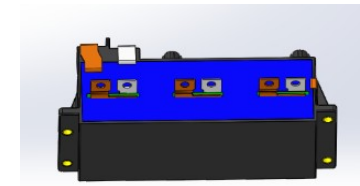
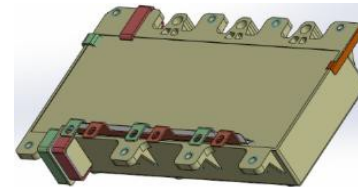
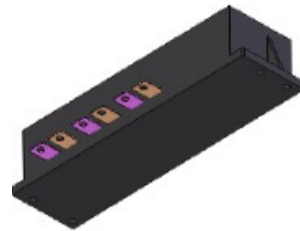
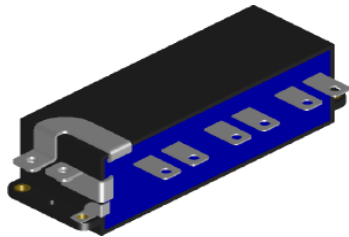
Inverter for PHEV



**BSG** (Belt-driven Starter Generator)



Inverter for EV Delivery truck



# *DLC series*



66988.TV



汽车之家



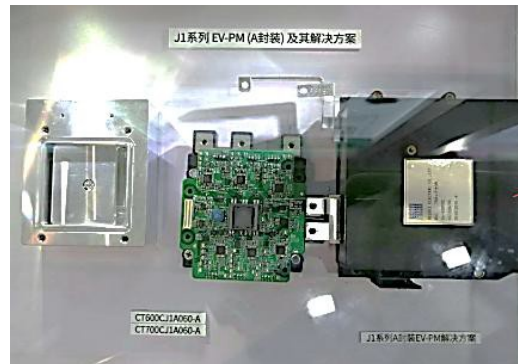
汽车之家

For automotive application

DC Link capacitor for Hitachi IGBT



DC Link capacitor for Mitsubishi IGBT



## *MPY series*

For automotive application



MPY

MPY720V106

- Input capacitor for On Board Charger “KIA EV (SOUL)”

# **BPX series**

For automotive application



BPX series



- **DC-DC Converter for EV (Jaguar)**

# *BMB & BPX series*

For automotive application



BMB & BPX series



- **DC-DC Converter for EV NEVS**



# *BMB & BPX series*

For automotive application



BMB & BPX series



- DC/DC converter for EV (FAW)

For automotive application

**Input Capacitor and Output Capacitor**

**BPC630J104**



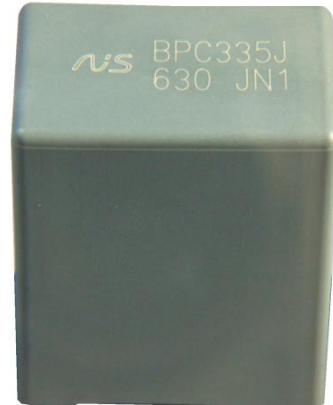
**BPC630J474**



**BPC630J225**



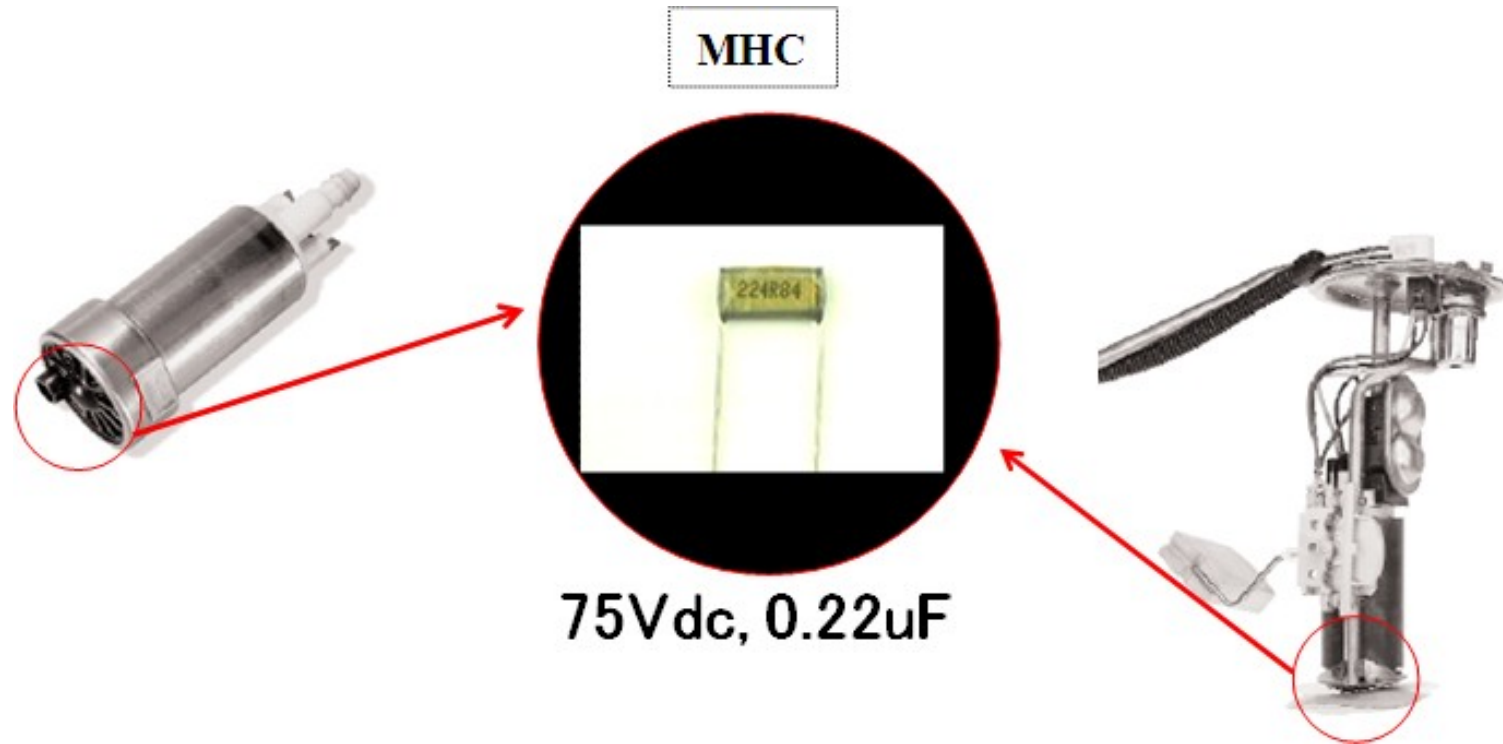
**BPC630J335**



**Quick charger for EV 90kW~120kW**



For automotive application



- **Noise suppression for fuel pump for GM**

# *Product lineup for Industrial application*



# *MP1 series for Power supply*

Plastic Case Type X2 Metallized polypropylene capacitor

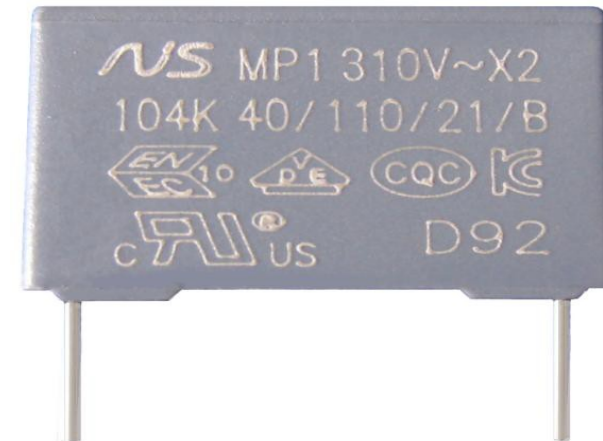
MP1 Type

Features and applications:

- Small and light weight
- Flame retardant resin case
- for AC noise suppression
- 310V.ac    103 ~ 475

International Safety standard

- VED NO: 40041628
- UL NO: E351313
- CQC NO: CQC12001079110
- CB NO: DE1 -57700
- KC NO: SU03052-11001B/11002/11003



## Aluminium Case (Cylindrical) Type DC-Link Film Capacitor **DLCA Type**

### ■ Features

- Used in DC-Link circuits, which can replace electrolytic capacitor.
- Low ESR for high ripple current.
- Low ESL, Self healing property, Long lifetime.

### ■ Applications

- Inverters of wind power and solar power
- Motor drive system, Welders, Elevators, UPS

### ■ Quick Reference Data



Description	Value
Operating temperature (hotspot)	-40°C~85°C
Rated DC voltage.	<b>700 V ~ 2000 V</b>
Capacitance	<b>50 μF ~ 2800 μF</b>
Capacitance tolerance	±5%(J) ±10% (K)
Dissipation factor (tanδ)	0.002 or less (at 100Hz 25°C)
Test voltage	terminal/terminal = 1.5 x Undc, 10s terminal/case = 2 x Undc + 1000Vac, 10s
Technology	Metallized polypropylene film
Design	Aluminium case/Resin dry (UL V-0)
Lifetime Expectancy	100,000 h at Un and <70°C hotspot
Standards	IEC 61071 (GB/T 17702), IEC 60068 (GB/T 2423)



# DLC series for Power Electronics

## Plastic Case (Cylindrical) Type DC-Link Film Capacitor

## DLCB Type

### ■ Features

- Used in DC-Link circuits, which can replace electrolytic capacitor.
- Low ESR for high ripple current.
- Low ESL, Self healing property, Long lifetime.

### ■ Applications

- Inverters of wind power
- Motor drive system
- Welders, Elevators

### ■ Quick Reference Data

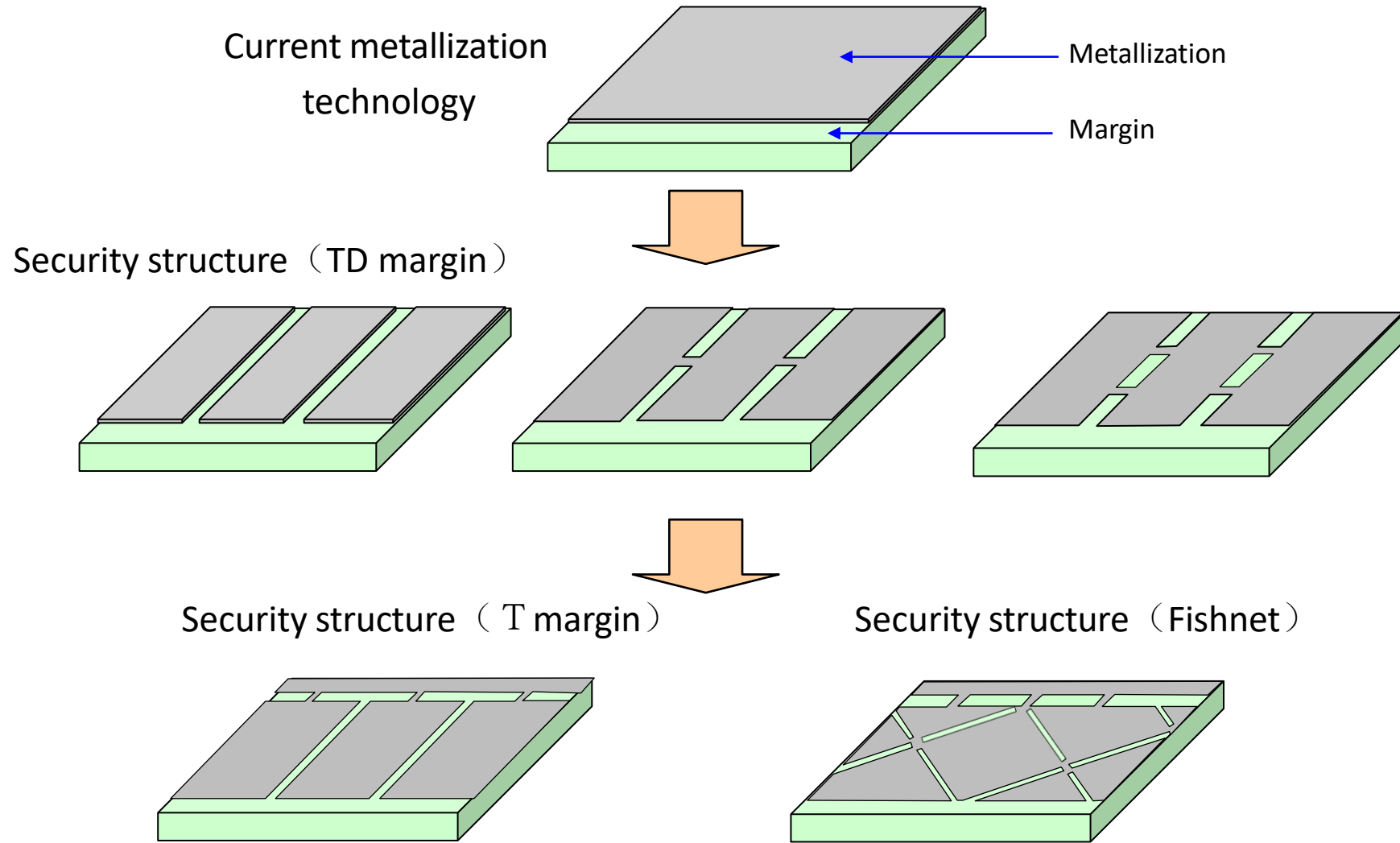


Description	Value
Operating temperature (hotspot)	-40°C ~ 85°C
Rated DC voltage	<b>600 V ~ 1500 V</b>
Capacitance	<b>18 μF ~ 500 μF</b>
Capacitance tolerance	±5%(J) ±10% (K)
Dissipation factor (tanδ)	0.002 or less (at 100Hz 25°C)
Test voltage	terminal/terminal = 1.5 x Un <sub>dc</sub> , 10s terminal/case = 2 x Un <sub>dc</sub> + 1000Vac, 10s
Technology	Metallized polypropylene film
Design	Plastic case/Resin dry (UL V-0)
Lifetime Expectancy	100,000 h at Un and <70°C hotspot
Standards	IEC 61071 (GB/T 17702)、IEC 60068 (GB/T 2423)

03 

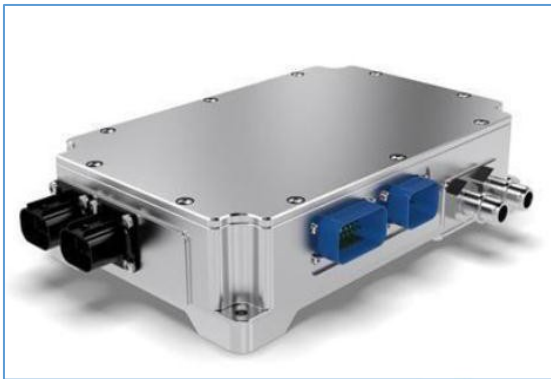
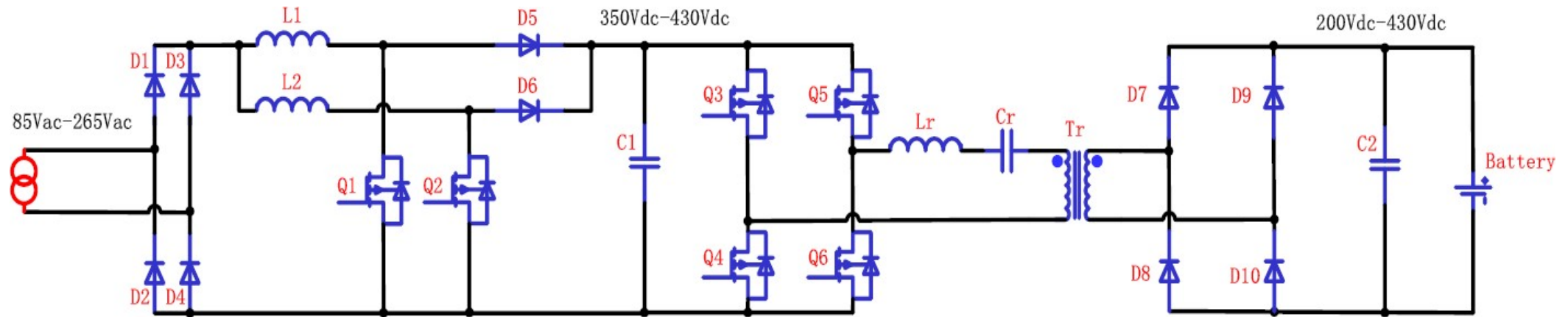
*Technology*





- **Low ESR for high ripple current, Self-healing function for high security.**

For High temperature application (150 °C)



□ OBC / DC-LINK / Compressor of Air-conditioner

New film coming soon for 150°C

• MPY U series -55°C~150°C

• DLC U series -55°C~150°C

04



*Corporate  
objectives*

## **Corporate objectives**

***We are aiming to become ...***



***Green Vehicles -- One of the top 3 suppliers***

---



***Inverter Air-conditioner -- One of the top 3 suppliers***

---



***Microwave, IH cooktop, Rice cooker -- #1 supplier***

---



***Electronic Toilets -- #1 supplier***

---

ELEKTRONIK  
**Blume**

**Alexander Stillig**

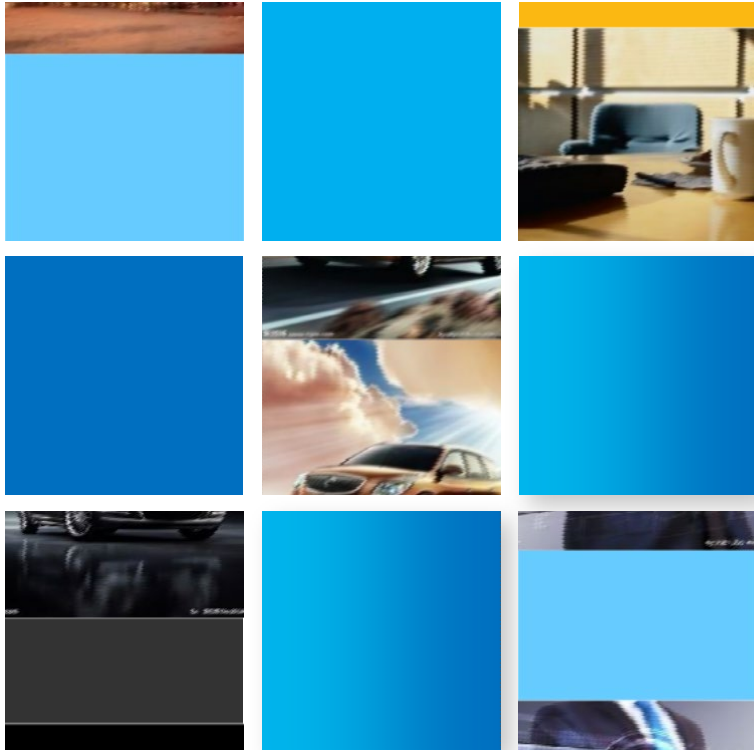
**BLUME ELEKTRONIK DISTRIBUTION GMBH**

**TECCENTER 1 | 31162 | BAD SALZDETFURTH**

**FON:(0 50 63) 27 12-227 | FAX:(0 50 63) 27 12-12**

**EMAIL: STILLIG@BLUME-ELEKTRONIK.DE**

**[www.blume-elektronik.de](http://www.blume-elektronik.de)**



We never stop challenging ourselves.

**Thank you !**

---