

NSSEI Electric Co.,Ltd



CONTENTS

01

Company
Profile

02

Product &
Customer

03

Technology

04

Corporate
Objectives

01 *Company Profile*



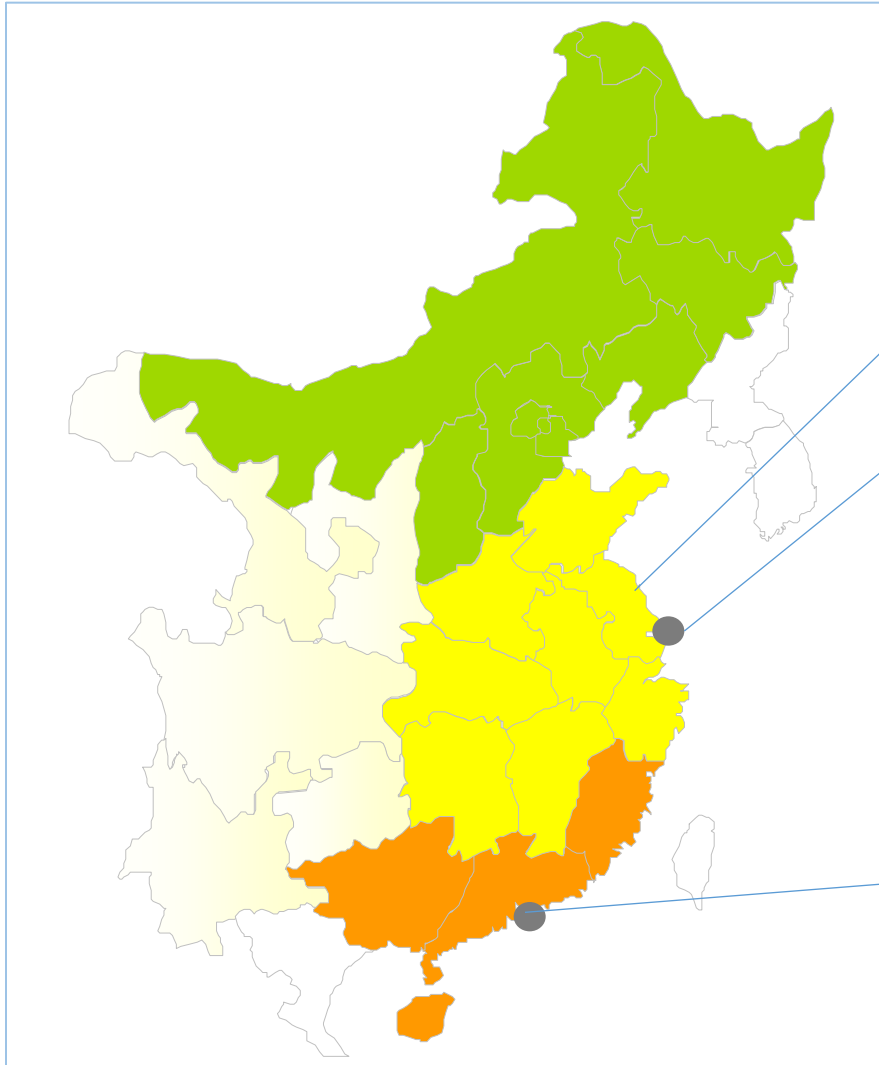
NISSEI GROUP

- **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



1959 Established in Nagano Prefecture, Japan

2008 Operated Yangzhou factory in China

2012 Participated in “electronica” (2014,2016,2018)

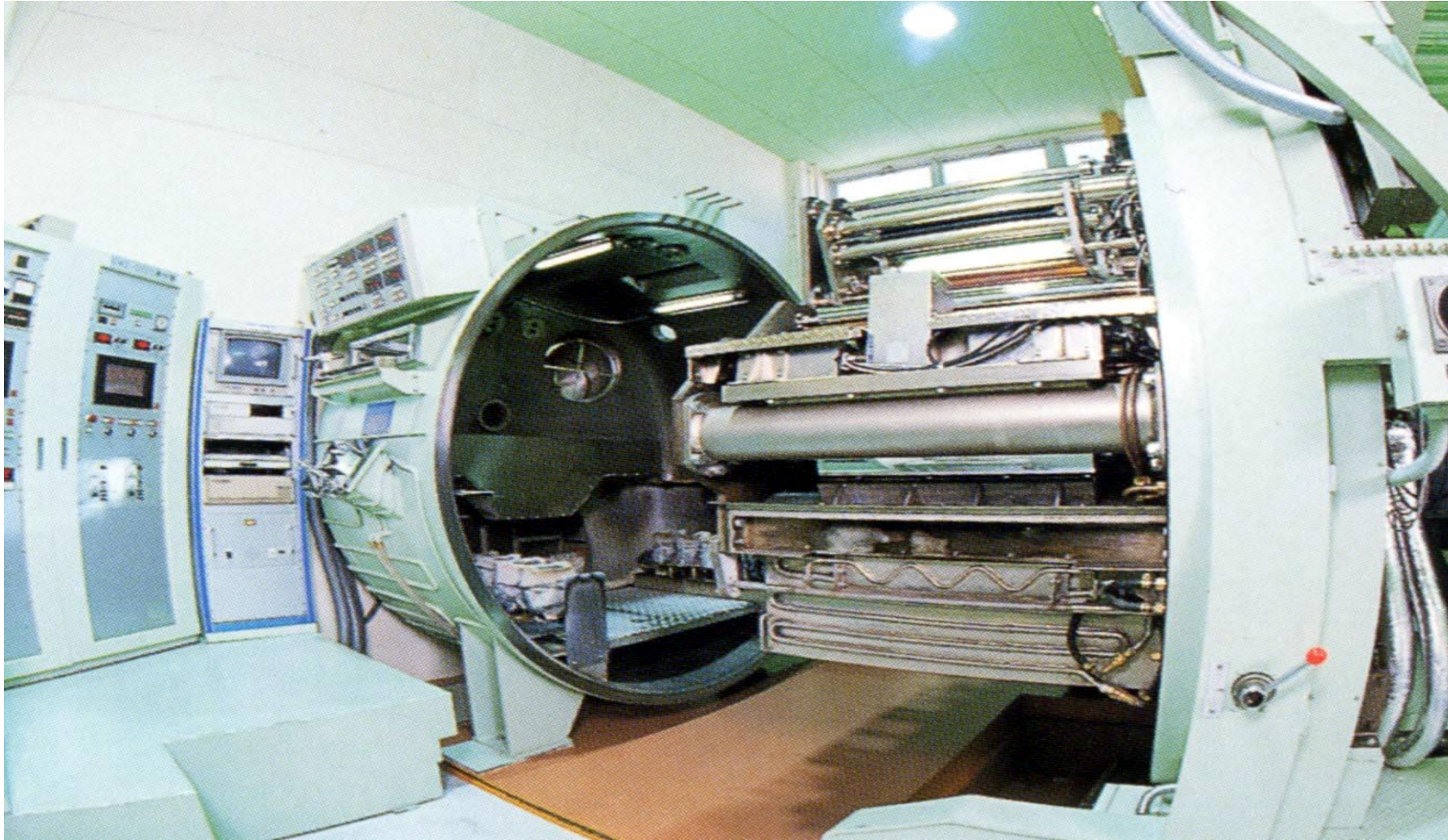
2014 Set up a clean energy and automotive department

2016 Obtained IATF16949 in Yangzhou factory in China

2019 Obtaining IATF16949 in Hanamaki factory in Japan

- **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**

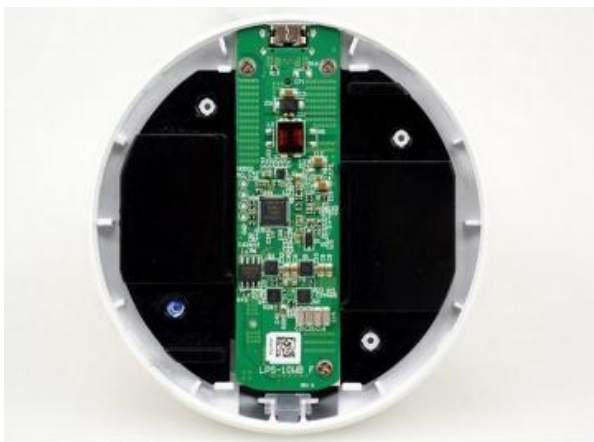
Vacuum metallization equipment



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

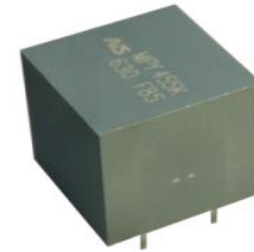
DCDC Converter



BPX



BMB



MPY

On Board Charger



BPC

Inverter



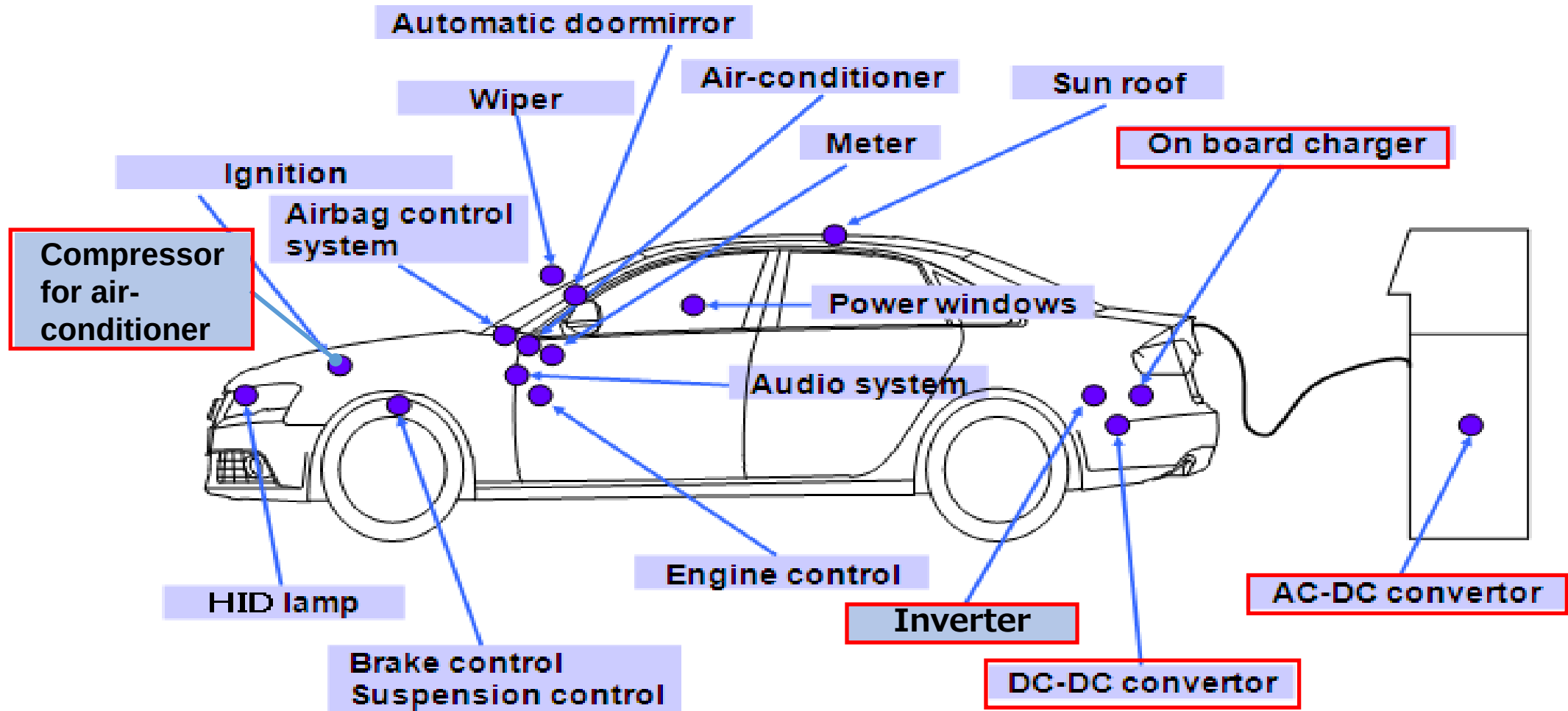
DLC



DLC

Quick charger

Application for automobile



Application for automobile

Wireless Power Transfer System

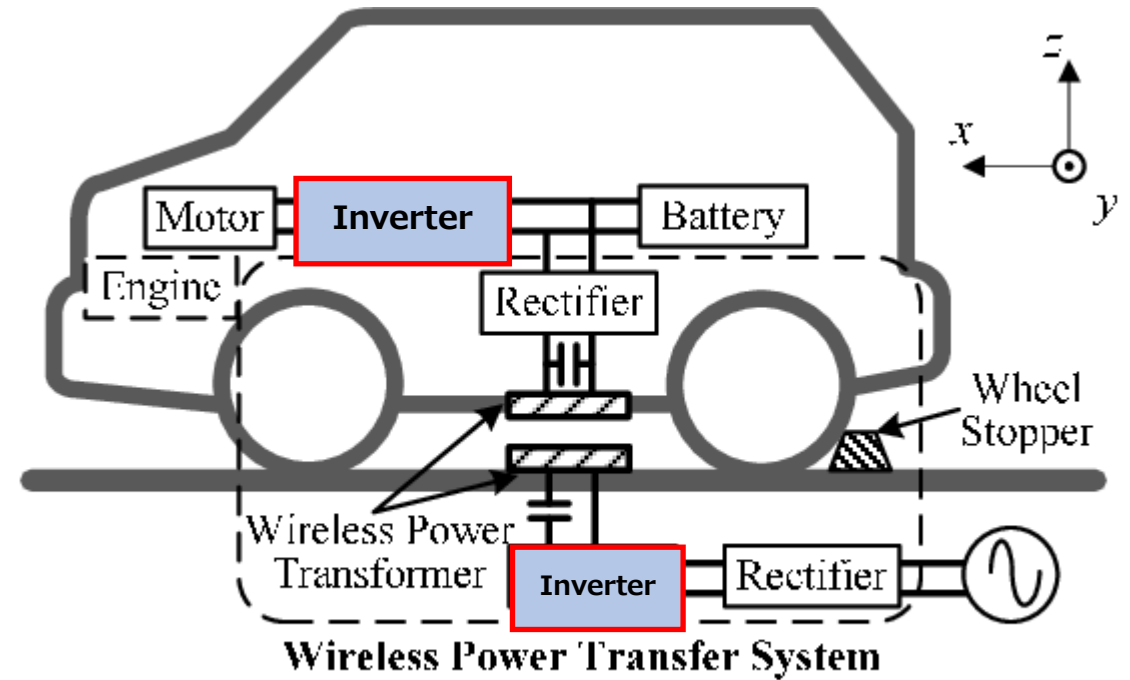


Figure 1. Wireless power transfer system of an EV and PHEV.

Major customers

For automotive application



DENSO



GCDN



NEVS

For automotive application

Inverter for EV 5KW~35KW



Inverter for EV 55KW

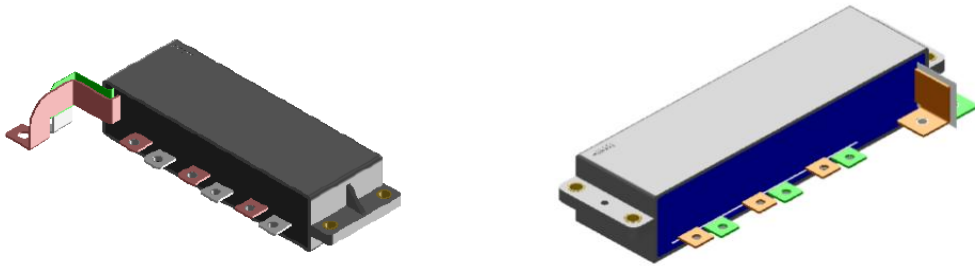


Inverter for EV

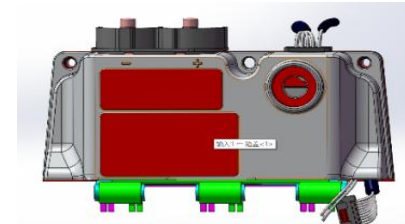


For automotive application

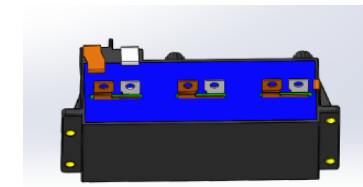
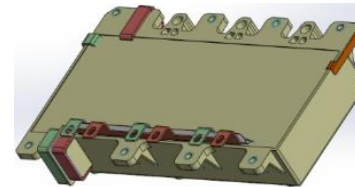
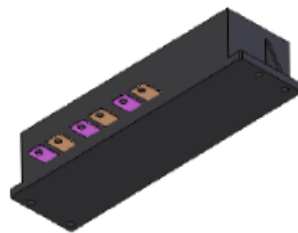
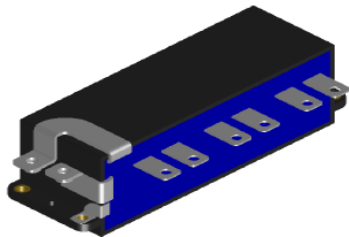
Inverter for PHEV



BSG (Belt-driven Starter Generator)



Inverter for EV Delivery truck



DLC series

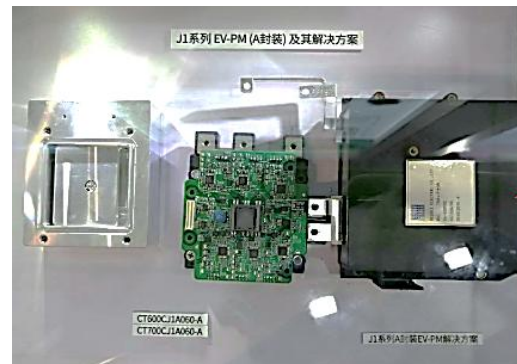


For automotive application

DC Link capacitor for Hitachi IGBT



DC Link capacitor for Mitsubishi IGBT



For automotive application



MPY

MPY720V106

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

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



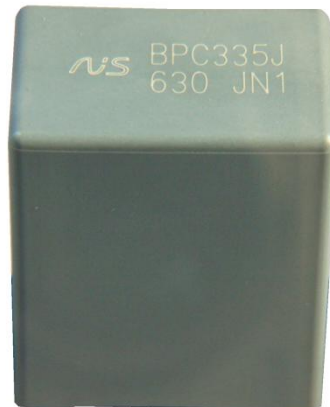
BPC630J474



BPC630J225



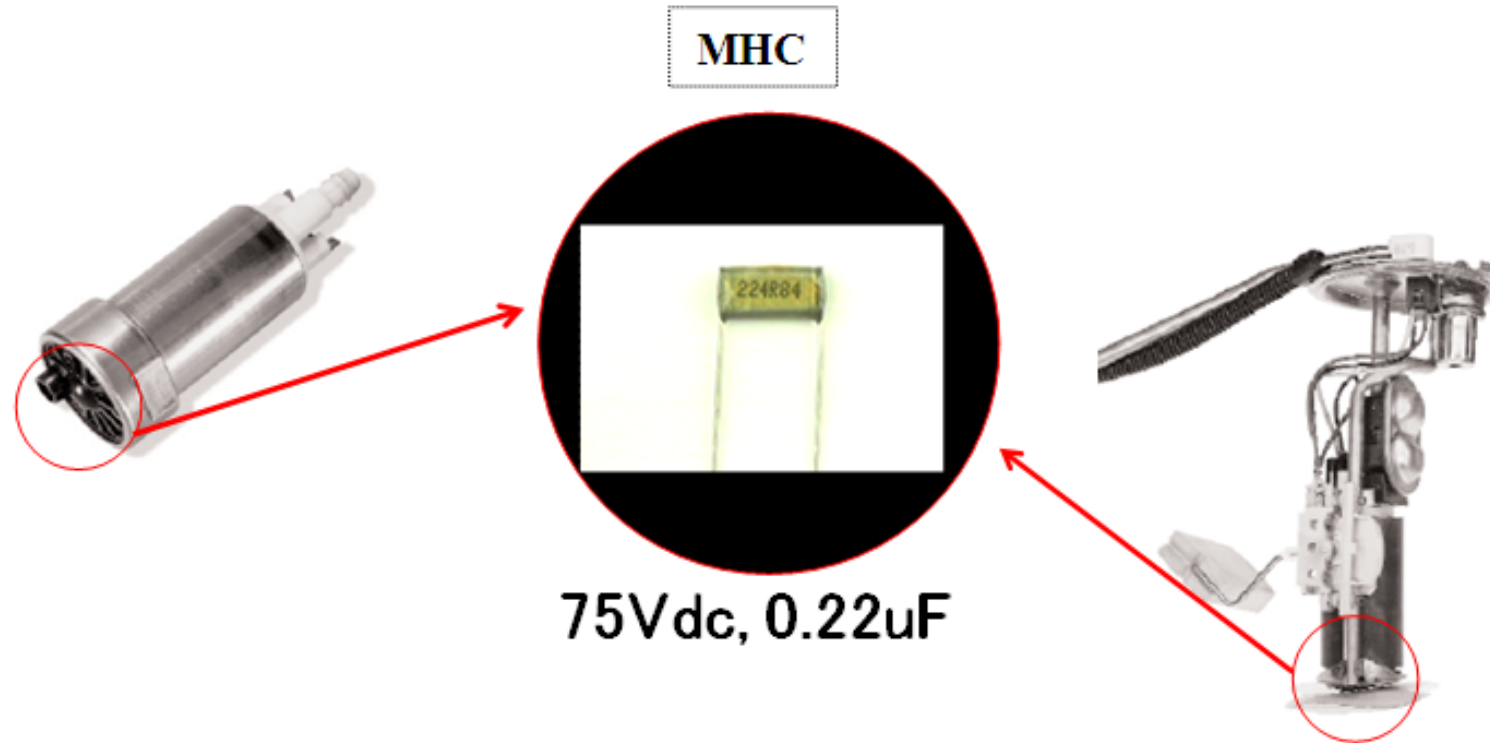
BPC630J335



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

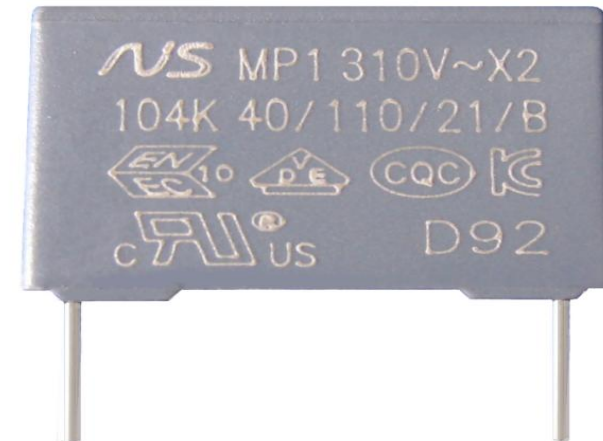
MP1 Type

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℃～85℃
Rated DC voltage.	700 V ～ 2000 V
Capacitance	50 μF ～ 2800 μF
Capacitance tolerance	±5%(J) ±10% (K)
Dissipation factor (tanδ)	0.002 or less (at 100Hz 25℃)
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℃ hotspot
Standards	IEC 61071 (GB/T 17702)、 IEC 60068 (GB/T 2423)

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**

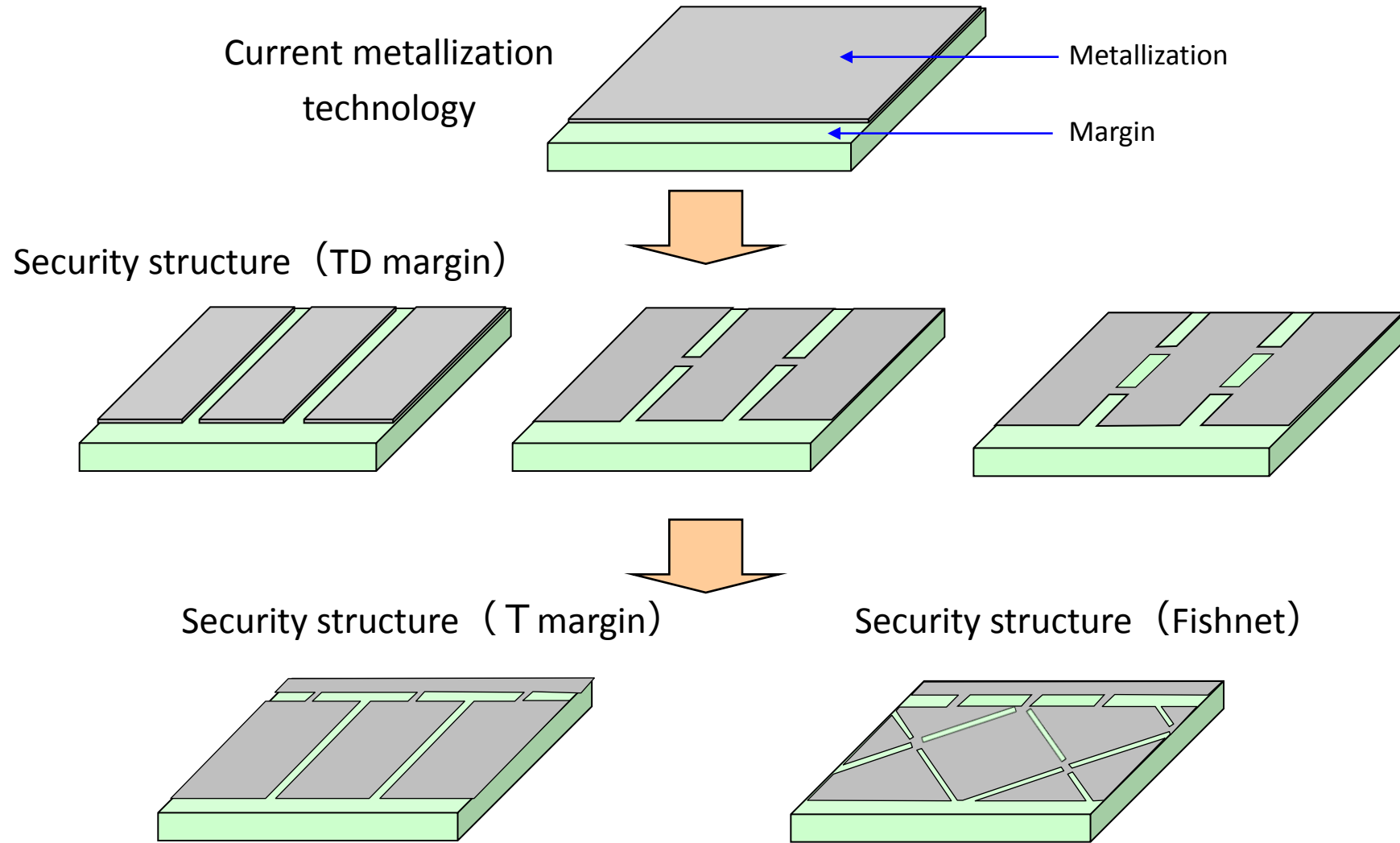
- Inverters of wind power
- Motor drive system
- Welders、 Elevators

■ **Quick Reference Data**



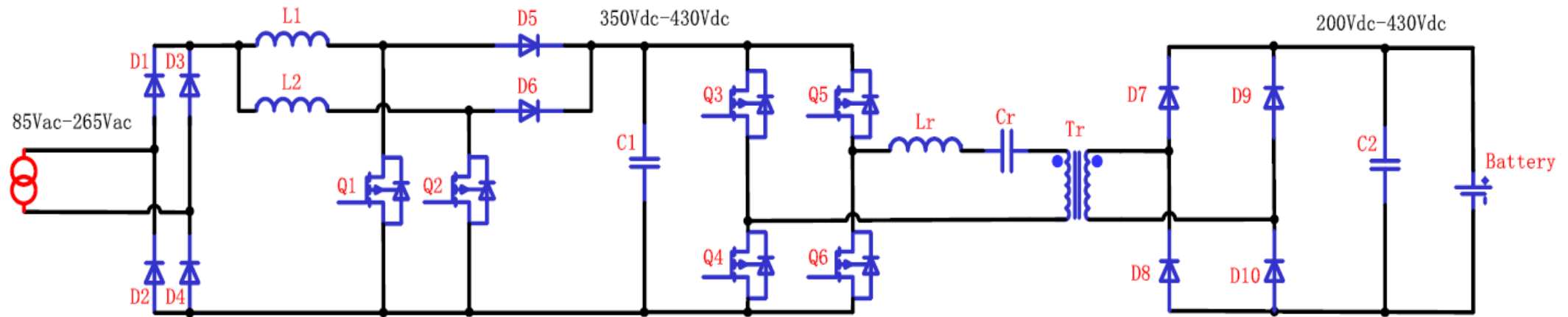
Description	Value
Operating temperature (hotspot)	-40℃～85℃
Rated DC voltage	600 V ~ 1500 V
Capacitance	18 μF ~ 500 μF
Capacitance tolerance	±5%(J) ±10% (K)
Dissipation factor (tanδ)	0.002 or less (at 100Hz 25℃)
Test voltage	terminal/terminal = 1.5 x Undc, 10s terminal/case = 2 x Undc + 1000Vac, 10s
Technology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

We are aiming to become ...



Green Vehicles -- One of the top 3 suppliers



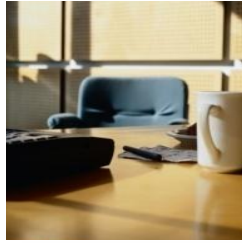
Inverter Air-conditioner -- One of the top 3 suppliers



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



Electronic Toilets -- #1 supplier



We never stop challenging ourselves.

Thank you !
