

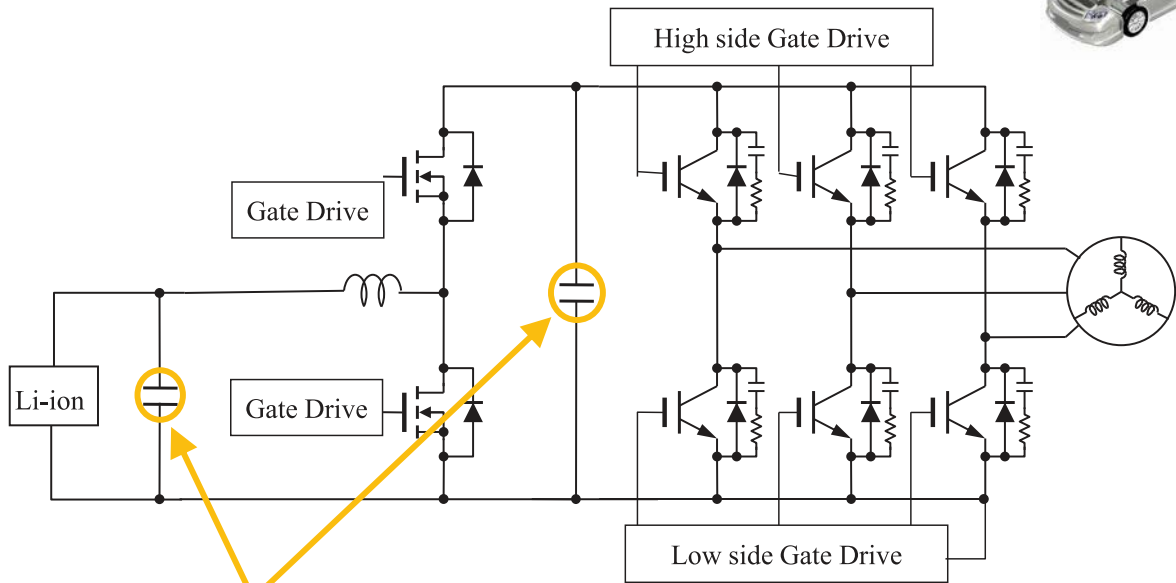
Application Guide

RECOMMENDED PRODUCTS PER APPLICATION



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(1) インバータ回路 (走行用) For Inverter Circuit



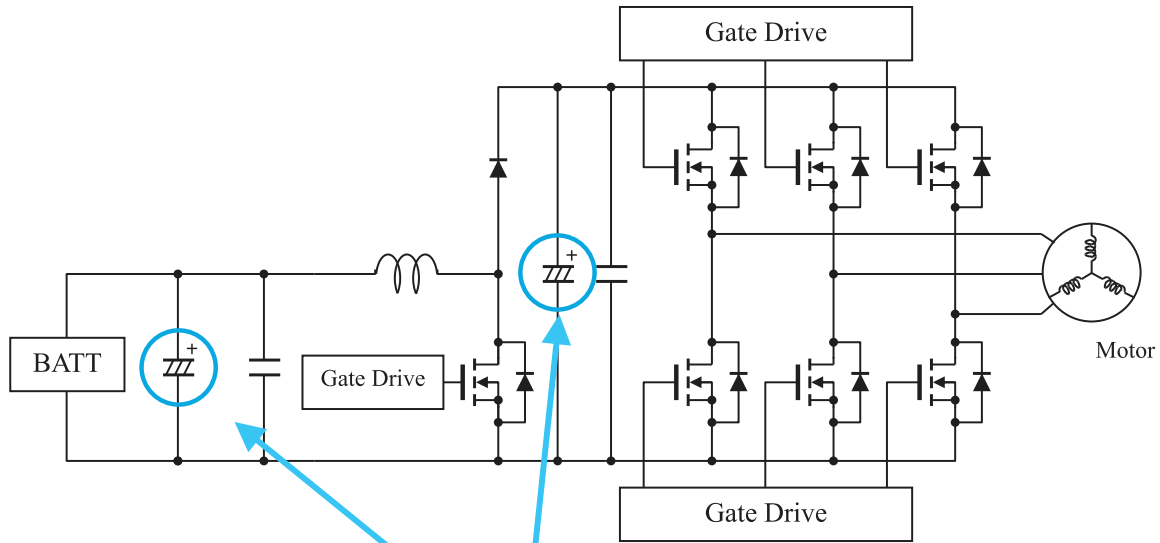
平滑用コンデンサ/Smoothing capacitor
Performance requirements: High ripple, Low loss
Recommended capacitor:
PML-CAP HPB series

For Inverter Circuit

Polymer Multilayer Capacitors
高温度、優れた温特、85°C85%RH対応品
HPB series (PMLCAP)
Temp.Range: -55~+125°C
Volt.Range: 500,900Vdc
Cap.Range: 10~25µF
Humidity : 85°C85%RH 1000hours



(2) 低圧インバータ回路 For Inverter Circuit (LowVoltage.)



平滑用コンデンサ/Smoothing capacitor
Performance requirements: Low ESR, High capacitance, High temp.
Recommended capacitor:
Aluminum Capacitors **HRX·HGX series**
Conductive Polymer Hybrid Type **PZF·PZH series**



For Inverter Circuit (LowVoltage.)

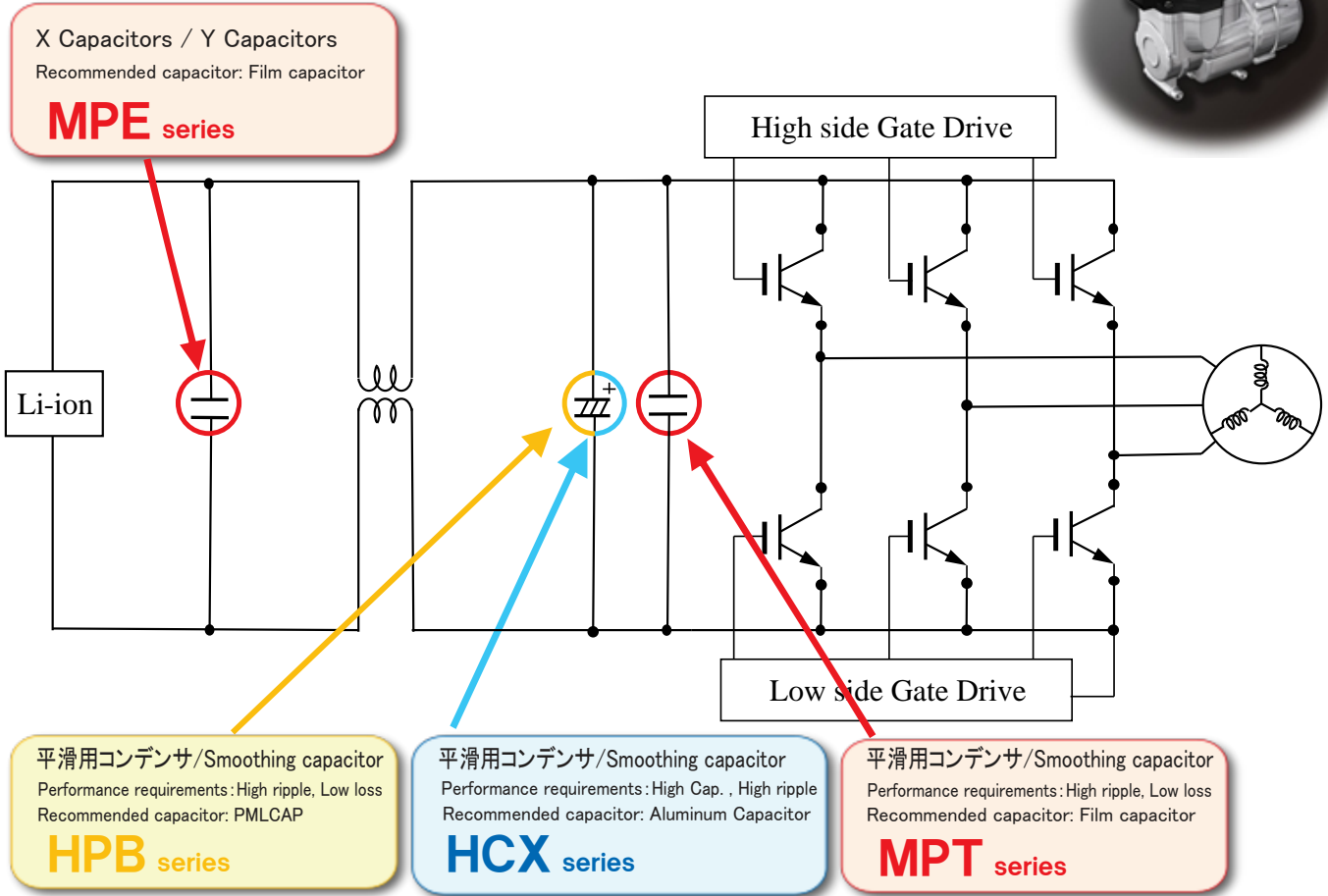
Aluminum Capacitors
小形, 高リップル, 125℃3,000h保証品
HRX series
Volt./Cap.Range: 25~70Vdc/240~5,100 μF

Aluminum Capacitors
小形, 高リップル, 135℃3,000h保証品
HGX series
Volt./Cap.Range: 25~80Vdc/240~6,800 μF

Conductive Polymer Hybrid Type
125℃ 低ESR, 高リップル, 高耐圧品
PZF series
Temp./Life: -55~+125℃/4,000hours
Volt./Cap.Range: 25~80Vdc/22~330 μF

Conductive Polymer Hybrid Type
135℃ 低ESR, 高リップル, 高耐圧品
PZH series
Temp./Life: -55~+135℃/4,000hours
Volt./Cap.Range: 25~63Vdc/33~820 μF

(3) 電動コンプレッサ Electric compressor



Aluminum Capacitors
小形, 高リップル, 高耐熱品
HCX series

Temp./Life: $-40 \sim +125^{\circ}\text{C} / 3,000\text{hours}$
Volt./Cap.Range: $250 \sim 290\text{Vdc} / 22 \sim 51 \mu\text{F}$



Film Capacitors
高耐熱, 大電流品
MPT series

Temp.Range: $-40 \sim +125^{\circ}\text{C}$
Volt.Range: 630Vdc
Cap.Range: $1 \sim 6.8 \mu\text{F}$



Polymer Multilayer Capacitors
高温, 優れた温特, $85^{\circ}\text{C} 85\% \text{RH}$ 対応品
HPB series (PMLCAP)

Temp.Range: $-55 \sim +125^{\circ}\text{C}$
Volt.Range: $500, 900\text{Vdc}$
Cap.Range: $10 \sim 25 \mu\text{F}$
Humidity : $85^{\circ}\text{C} 85\% \text{RH}$
1000hours

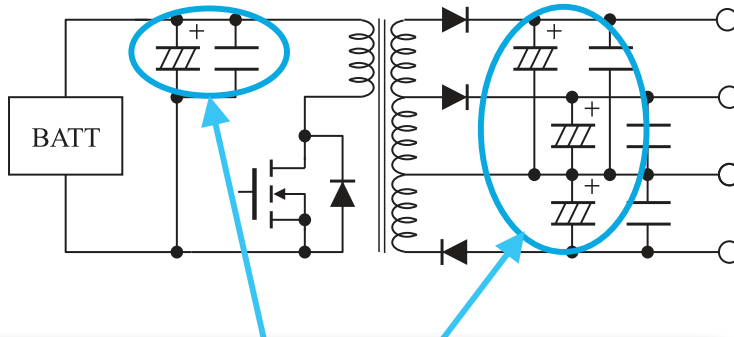


Film Capacitors
高耐压品
MPE series

Temp.Range: $-40 \sim +105^{\circ}\text{C}$
Volt.Range: $800\text{Vdc} / 250\text{Vac}$
 $\sim 1600\text{Vdc} / 700\text{Vac}$
Cap.Range: $0.001 \sim 0.56 \mu\text{F}$



(4) ゲート駆動DC/DCコンバータ Gate Drive DC/DC Converter



平滑用コンデンサ/Smoothing capacitor

Performance requirements: Low Impedance, High temperature, SurfaceMount

Recommended capacitor:

Aluminum Capacitor

TAV・**TGV** series

Conductive Polymer Hybrid Type

PKV・**PJV**・**PHV** series

Polymer Multilayer Capacitors
PMLCAP

MS series



Gate Drive DC/DC Converter

Conductive Polymer Hybrid Type
125℃ 低ESR, 高リップル, 高耐圧品, SMD

PKV series

Temp./Life: 125℃/4,000hours
Volt./Cap.Range: 25~35Vdc/220~560 μF



PJV series

Temp./Life: 125℃/4,000hours
Volt./Cap.Range: 25~63Vdc/47~820 μF

Conductive Polymer Hybrid Type
135℃ 低ESR, 高リップル, 高耐圧品, SMD

PHV series

Temp./Life: 135℃/2,000~4,000hours
Volt./Cap.Range: 25~63Vdc/33~560 μF



Aluminum Capacitors
高温度, 低ESR品

TAV series

Temp./Life: 125℃/2,000~4,000hours
Volt./Cap.Range: 35Vdc/47~330 μF



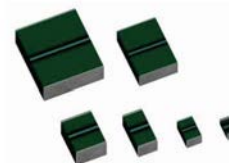
TGV series

Temp./Life: 125℃/3,000~5,000hours
Volt./Cap.Range: 16~80Vdc/33~3,300 μF

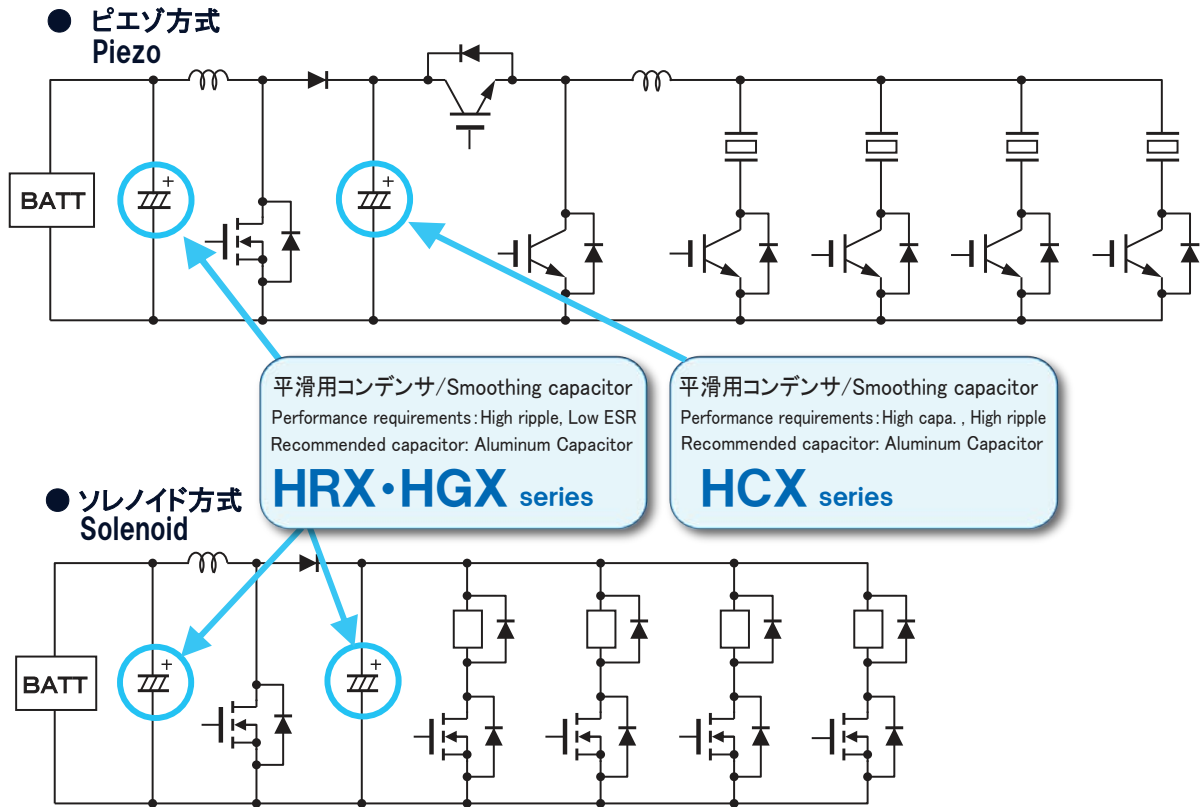
Polymer Multilayer Capacitors
高温度, 優れた温特, 85℃85%RH対応品

MS series (PMLCAP)

Temp.Range: -55~+125℃
Volt./Cap.Range: 10~50Vdc/0.001~2.2 μF



(5) インジェクタ駆動回路 Injector Drive



Injector Drive

Aluminum Capacitors

小形, 高リップル, 125℃3,000h保証品

HRX series

Volt./Cap.Range: 25~70Vdc/240~5,100 μ F



Aluminum Capacitors

小形, 高リップル, 125℃3,000h保証品

HCX series

Volt./Cap.Range: 250~290Vdc/22~51 μ F



Aluminum Capacitors

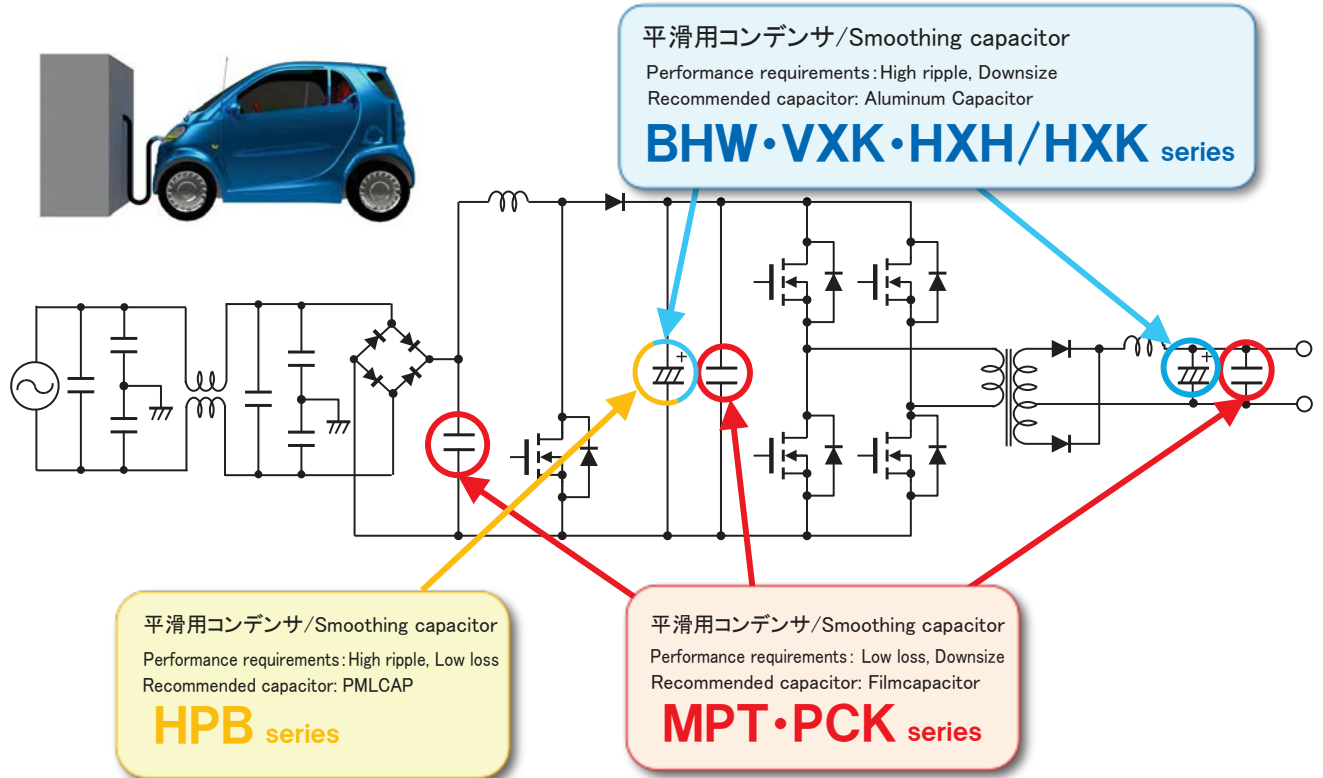
小形, 高リップル, 135℃3,000h保証品

HGX series

Volt./Cap.Range: 25~80Vdc/240~6,800 μ F



(6) 充電回路 接触 (プラグイン方式) Charging system of a plug-in vehicle



Charging system of a plug-in vehicle

Aluminum Capacitors
小形, 高リップル品
VXK series



Temp./Life: 105°C/5,000hours
Volt./Cap.Range: 400~500Vdc/68~1,200 μF

超高リップル品
HXH/HXK series

Temp./Life: 105°C/5,000hours (or 3,000hours)
Volt./Cap.Range: 400~450Vdc/82~1,000 μF

Aluminum Capacitors
超小形化, 長寿命品
BHW series



Temp./Life: 105°C/10,000~12,000hours
Volt./Cap.Range: 400~450Vdc/47~220 μF

Polymer Multilayer Capacitors
高温, 優れた温特, 85°C85%RH対応品
HPB series (PMLCAP)



Temp.Range: -55~+125°C
Volt.Range: 500,900Vdc
Cap.Range: 10~25 μF
Humidity : 85°C85%RH
1000hours

Film Capacitors
高耐熱, 大電流品
MPT series



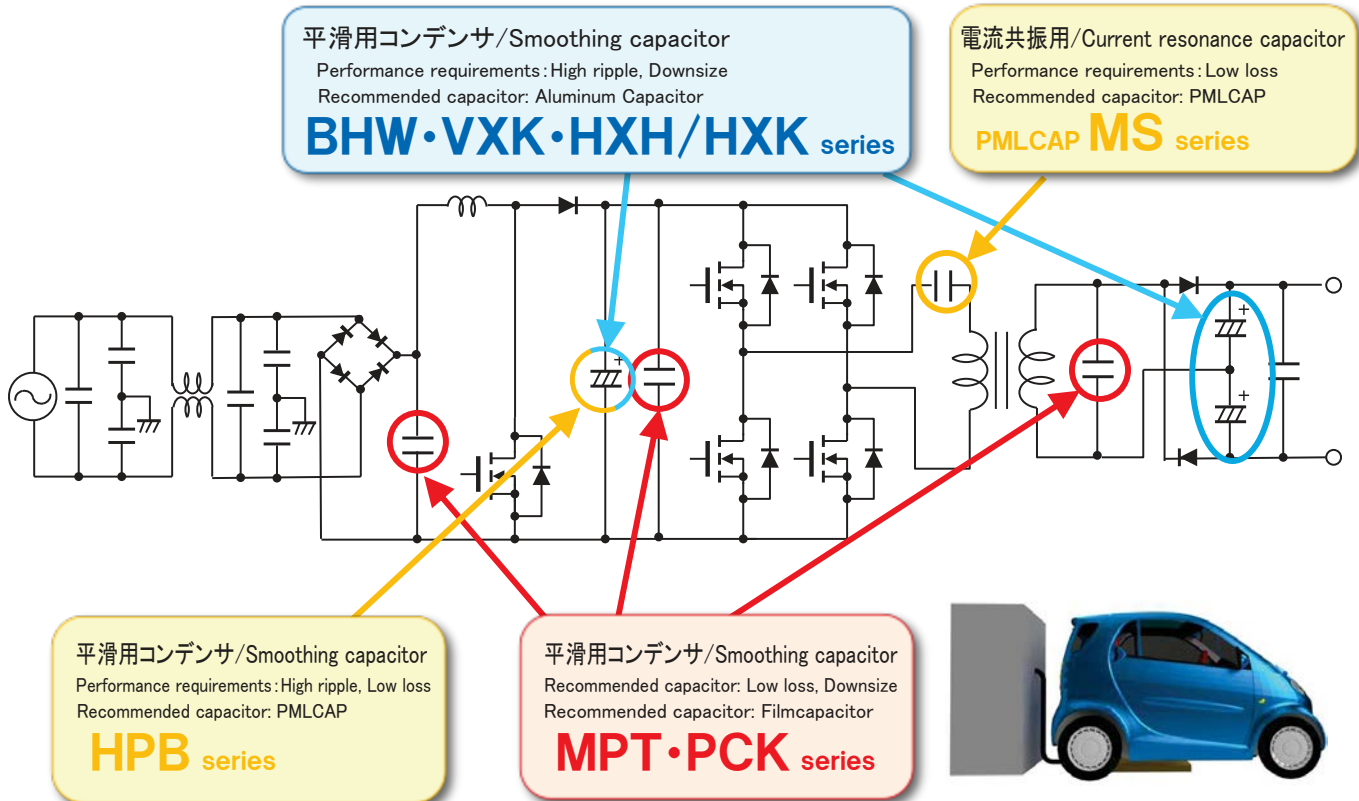
Temp.Range: -40~+125°C
Volt./Cap.Range: 630Vdc/1~6.8 μF

小形化, 大電流品
PCK series



Temp.Range: -40~+105°C (85°C)
Volt./Cap.Range: 450~2,000Vdc/0.01~33 μF

(7) 充電回路 非接触方式 Charging system of non contacting



Charging system of non contacting

Aluminum Capacitors
小形, 高リップル品
VXK series
Temp./Life: 105°C/5,000hours
Volt./Cap.Range: 400~500Vdc/68~1,200 μF

超高リップル品
HXH/HXK series
Temp./Life: 105°C/5,000hours (or 3,000hours)
Volt./Cap.Range: 400~450Vdc/82~1,000 μF

Aluminum Capacitors
超小形化, 長寿命品
BHW series
Temp./Life: 105°C/10,000~12,000hours
Volt./Cap.Range: 400~450Vdc/47~220 μF

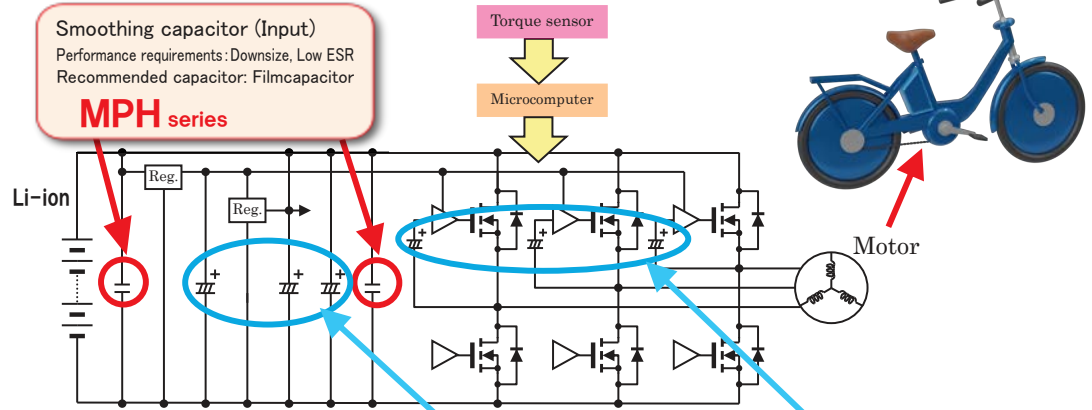
Film Capacitors
高耐熱, 大電流品
MPT series
Temp.Range: -40~+125°C
Volt./Cap.Range: 630Vdc/1~6.8 μF

小形化, 大電流品
PCK series
Temp.Range: -40~+105°C (85°C)
Volt./Cap.Range: 450~2,000Vdc/0.01~33 μF

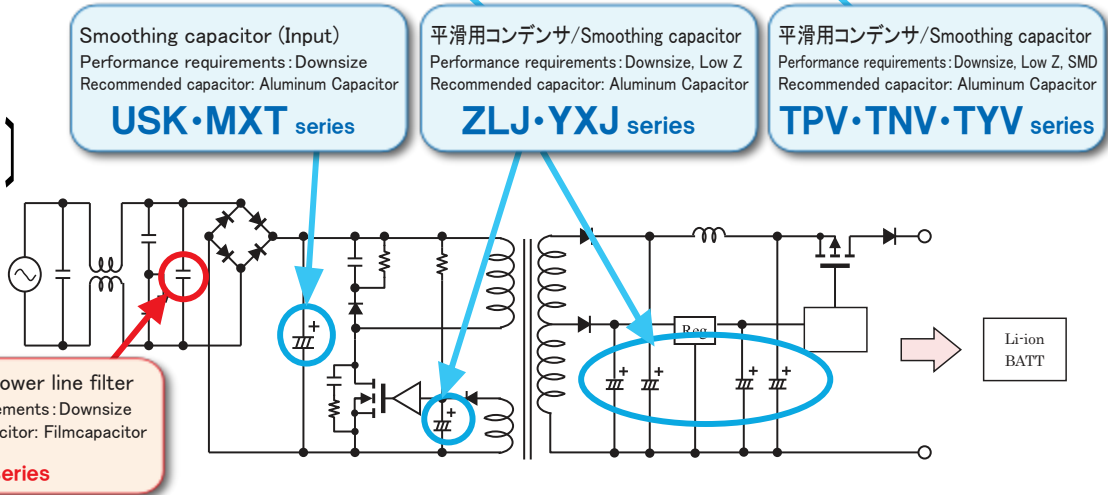
Polymer Multilayer Capacitors
高温, 優れた温特, 85°C 85%RH対応品
HPB series (PMLCAP)
Temp.Range: -55~+125°C
Volt.Range: 500,900Vdc
Cap.Range: 10~25 μF

MS series (PMLCAP)
Temp.Range: -55~+125°C
Volt./Cap.Range: 10~50Vdc/0.001~2.2 μF

〔車両本体〕
E-bicycle



〔充電器回路図〕
Charger



Electric power-assisted bicycle

Film Capacitors
小形, ACライン用
MMBA series



Temp./Range: -40~+85℃
Volt./Cap.Range: 125, 250Vac/0.01~1μF

小形化 大電流品
MPH series

Temp./Range: -40~+105℃
Volt./Cap.Range: 100~800Vdc/0.047~22μF

Aluminum Capacitors
小形化, 長寿命, 低インピーダンス品
ZLJ series

Temp./Life: 105℃/6,000~10,000hours
Volt./Cap.Range: 6.3~120Vdc/8.2~8,200μF

YXJ series

Temp./Life: 105℃/4,000~10,000hours
Volt./Cap.Range: 6.3~100Vdc/1~15,000μF



Aluminum Capacitors
超小形化品
USK series



Temp./Life: 85℃/3,000hours
Volt./Cap.Range: 16~500Vdc/100~82,000μF

MXT series

Temp./Life: 105℃/3,000hours
Volt./Cap.Range: 400~500Vdc/150~1,500μF

Aluminum Capacitors
小形化, 高リップル, 低ESR品
TPV series

Temp./Life: 105℃/2,000hours
Volt./Cap.Range: 6.3~50Vdc/47~2,200μF

TNV series

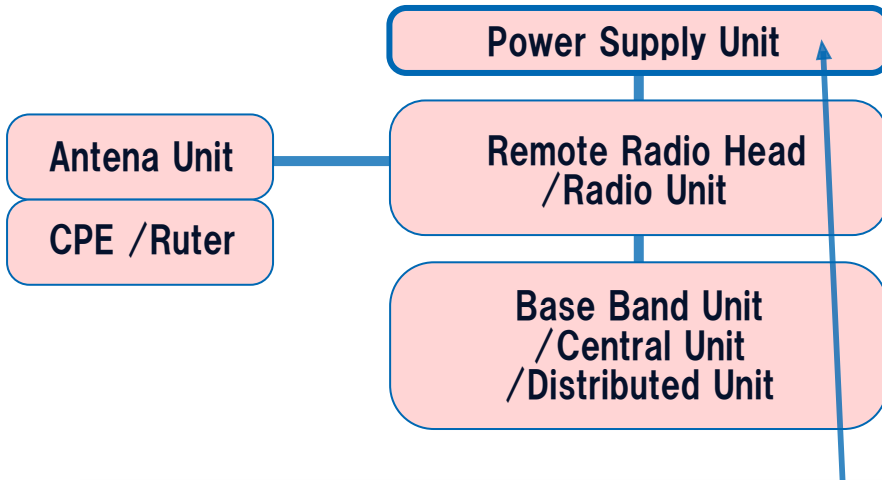
Temp./Life: 105℃/3,000~5,000hours
Volt./Cap.Range: 6.3~35Vdc/330~2,200μF

TYV series

Temp./Life: 105℃/8,000hours
Volt./Cap.Range: 25,35Vdc/330~820μF



(1) 電源回路 Power Supply Unit



平滑用コンデンサ/Smoothing capacitor
Performance requirements: High temp. , Longlife, Downsize, High ripple, Low ESR

Recommended capacitor:
Smoothing capacitor (INPUT)
Aluminum Capacitor

Smoothing capacitor (OUTPUT)
Conductive Polymer Hybrid Type

Aluminum Capacitor

VXT・THK series
LXW・EXW series
PZK・PZJ・PZF・PZE series
RXF・RXL・JXF・ZLJ series

Power Supply Unit

Aluminum Capacitors
小形化, 長寿命, 高温度品
VXT series



Temp./Life: 105°C / 5,000hours
Volt./Cap.Range : 400~450Vdc / 120~1,200 µF

THK series

Temp./Life: 125°C / 2,000hours
Volt./Cap.Range : 400~450Vdc / 100~1,000 µF

Aluminum Capacitors
小形化, 長寿命, 高温度品
LXW series

Temp./Life: 105°C / 10,000~12,000hours
Volt./Cap.Range : 400~500Vdc / 18~220 µF

EXW series

Temp./Life: 125°C / 3,000~5,000hours
Volt./Cap.Range : 400~500Vdc / 8.2~150 µF

Aluminum Capacitors
長寿命, 低Z品



RXF series

Temp./Life: 125°C / 2,000~5,000hours
Volt./Cap.Range : 25~80Vdc / 180~7,500 µF

RXL series

Temp./Life: 125°C / 3,000~8,000hours
Volt./Cap.Range : 16~35Vdc / 510~7,500 µF


ZLJ series

Temp./Life: 105°C / 6,000~10,000hours
Volt./Cap.Range : 6.3~120Vdc / 8.2~8,200 µF

JXF series

Temp./Life: 105°C / 6,000~8,000hours
Volt./Cap.Range : 16~100Vdc / 68~10,000 µF

Conductive Polymer Hybrid Type
低ESR, 高リップル品



PZK series

Temp./Life: 125°C / 4,000hours
Volt./Cap.Range : 25,35Vdc / 220~560 µF

PZJ series

Temp./Life: 125°C / 4,000hours
Volt./Cap.Range : 25~63Vdc / 47~820 µF

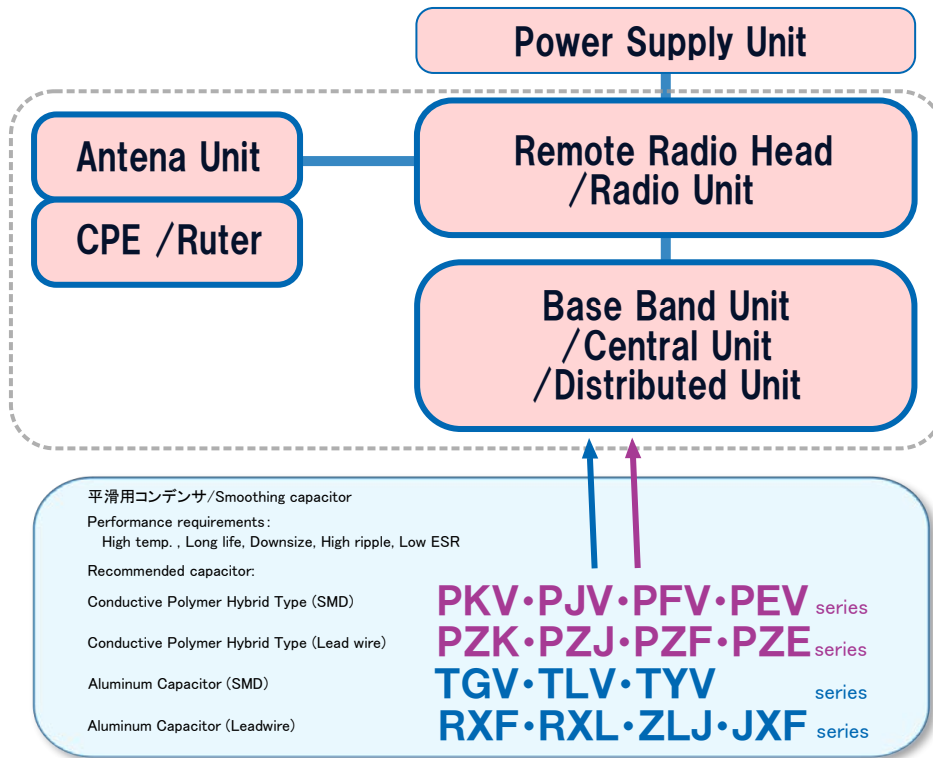
PZF series

Temp./Life: 125°C / 4,000hours
Volt./Cap.Range : 25~80Vdc / 22~330 µF

PZE series

Temp./Life: -55~+105°C / 10,000hours
Volt./Cap.Range : 25~80Vdc / 22~330 µF

(2) 通信回路 Communication Unit



Communication Unit

Conductive Polymer Hybrid Type
低ESR, 高リップル品, リード線タイプ

PZK series

Temp./Life: 125°C/4,000hours
Volt./Cap.Range: 25,35Vdc/220~560 μF

PZJ series

Temp./Life: 125°C/4,000hours
Volt./Cap.Range: 25~63Vdc/47~820 μF

PZF series

Temp./Life: 125°C/4,000hours
Volt./Cap.Range: 25~80Vdc/22~330 μF

PZE series

Temp./Life: -55~+105°C/10,000hours
Volt./Cap.Range: 25~80Vdc/22~330 μF



Aluminum Capacitors

小形化, 長寿命, 低ESR, SMD
TGV series

Temp./Life: 125°C/3,000~5,000hours
Volt./Cap.Range: 16~80Vdc/33~3,300 μF

TLV series

Temp./Life: 105°C/2,000~5,000hours
Volt./Cap.Range: 6.3~100Vdc/22~10,000 μF

TYV series

Temp./Life: 105°C/8,000hours
Volt./Cap.Range: 25,35Vdc/330~820 μF



Conductive Polymer Hybrid Type
長寿命, 低ESR, 高リップル, SMD

PKV series

Temp./Life: 125°C/4,000hours
Volt./Cap.Range: 25,35Vdc/220~560 μF

PJV series

Temp./Life: 125°C/4,000hours
Volt./Cap.Range: 25~63Vdc/47~820 μF

PFV series

Temp./Life: 125°C/4,000hours
Volt./Cap.Range: 25~80Vdc/10~330 μF

PEV series

Temp./Life: -55~+105°C/10,000hours
Volt./Cap.Range: 25~80Vdc/10~330 μF



Aluminum Capacitors

長寿命, 低Z品

RXF series

Temp./Life: 125°C/2,000~5,000hours
Volt./Cap.Range: 25~80Vdc/180~7,500 μF

RXL series

Temp./Life: 125°C/3,000~8,000hours
Volt./Cap.Range: 16~35Vdc/510~7,500 μF

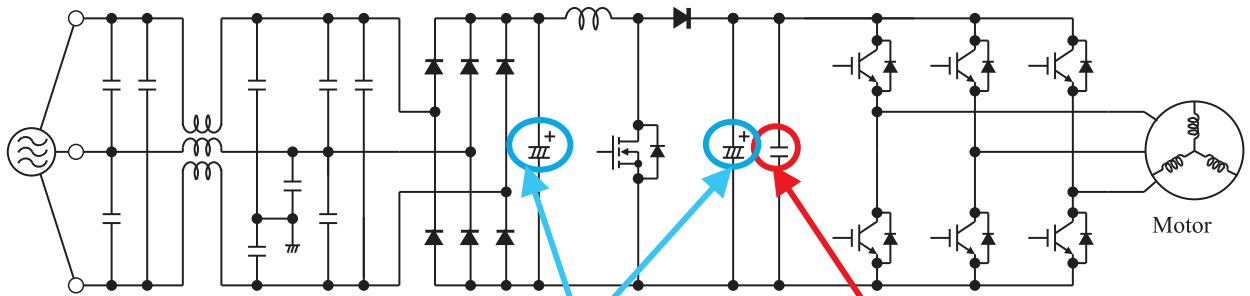
ZLJ series

Temp./Life: 105°C/6,000~10,000hours
Volt./Cap.Range: 6.3~120Vdc/8.2~8,200 μF

JXF series

Temp./Life: 105°C/6,000~8,000hours
Volt./Cap.Range: 16~100Vdc/68~10,000 μF





平滑用コンデンサ/Smoothing capacitor
Performance requirements: High ripple
Recommended capacitor: Aluminum Capacitor
MXH・VXH series

スナバ用コンデンサ/Snubber circuit
Performance requirements: Downsize, Low ESL, Low ESR
Recommended capacitor: Film capacitor
MPH・PCK series



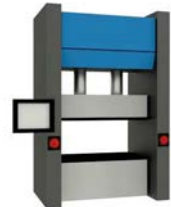
Belt conveyor



Elevator



Industrial robot



Press machine

Inverters for general purpose

Aluminum Capacitors
105°C, 小形化, 3000h保証品

MXH series

Volt. : 400~550Vdc
Cap. : 56~1,200 μ F

●多端子形状も対応可能



Aluminum Capacitors
105°C, 小形化, 5000h保証品

VXH series

Volt. : 200~500Vdc
Cap. : 56~2,700 μ F

●多端子形状も対応可能



Film Capacitors
小形化, 大電流品

MPH series

Temp.Range: -40~+105°C
Volt./Cap.Range: 100~800Vdc/0.47~22 μ F

大電流, 低うなり音品

PCK series

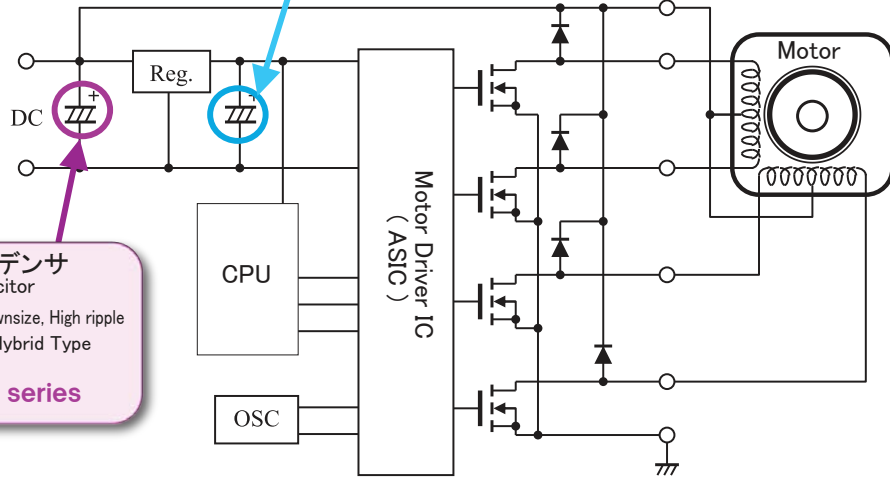
Temp.Range: -40~+105°C (85°C)
Volt./Cap.Range: 450~2,000Vdc/0.01~33 μ F





平滑用コンデンサ/Smoothing capacitor
Performance requirements: Low impedance
Recommended capacitor: Aluminum Capacitors

ZLQ・TPV・TYV・TNV series



平滑, バッファ用コンデンサ
Smoothing & Buffer capacitor
Performance requirements: Downsize, High ripple
Recommended capacitor: Hybrid Type
PZE・PEV series



Printer



Laptop Computer



Slot machine

Stepper Motor

Conductive Polymer Hybrid Type
105°C, 低ESR, 高リップル, 高耐圧品
PZE series

Temp./Life: -55~+105°C/10,000hours
Volt./Cap.Range: 25~80Vdc/22~330 μF



Aluminum Capacitors
小形化, 低インピーダンス品
ZLQ series

Temp./Life: 105°C/3,000~6,000hours
Volt./Cap.Range: 6.3~35Vdc/56~12,000 μF



Conductive Polymer Hybrid Type
105°C, 低ESR, 高リップル, 高耐圧品, SMD
PEV series

Temp./Life: -55~+105°C/10,000hours
Volt./Cap.Range: 25~80Vdc/10~330 μF



Aluminum Capacitors
小形化, 高リップル, 低ESR品
TPV series

Temp./Life: 105°C/2,000hours
Volt./Cap.Range: 6.3~50Vdc/47~2,200 μF



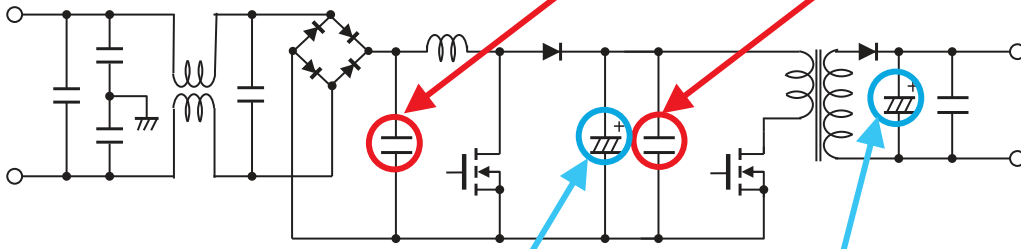
TNV series
Temp./Life: 105°C/3,000~5,000hours
Volt./Cap.Range: 6.3~35Vdc/330~2,200 μF

TYV series
Temp./Life: 105°C/8,000hours
Volt./Cap.Range: 25,35Vdc/330~820 μF

**PFC付き
フライバック回路**
PFC Flyback-Converter

入力部平滑用コンデンサ/Smoothing capacitor(INPUT)
Performance requirements: Low loss, Downsize
Recommended: Film capacitor **MPK・MPY series**

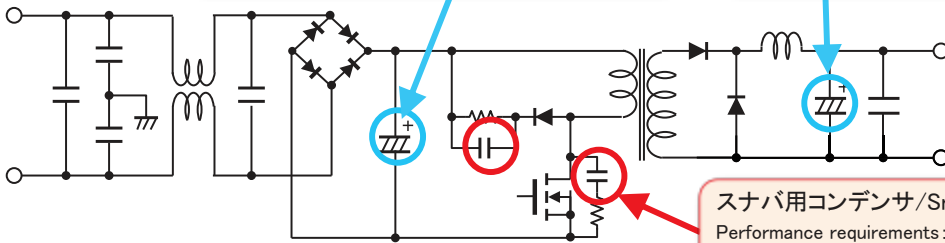
スナバ用コンデンサ/Snubber circuit
Performance requirements: Low ESR, Low ESL, Downsize
Recommended: Film capacitor **MPE series**



**スナバ付き
フォワード回路**
Snubber/Forward-Converter

入力部平滑用コンデンサ/Smoothing capacitor(INPUT)
Performance requirements: Downsize, High ripple
Recommended capacitor: Aluminum Capacitors
USK・MXT・VXK series (Snap-in Type)
HXW・CXW・LXW series (Lead Type)

平滑用コンデンサ/Smoothing capacitor
Performance requirements: Low Z, Downsize, Long life, High ripple
Recommended capacitor: Aluminum Capacitors
ZLQ・ZLJ series



スナバ用コンデンサ/Snubber circuit
Performance requirements: Low ESR, Low ESL, Downsize
Recommended: Film capacitor **MPE series**

Switch-Mode Power Supply

Aluminum Capacitors **超小形化品**

USK series

Temp./Life: 85°C/3,000hours
Volt./Cap.Range: 16~500Vdc/100~82,000 μF

MXT series

Temp./Life: 105°C/3,000hours
Volt./Cap.Range: 400~450Vdc/150~1,500 μF

VXT series

Temp./Life: 105°C/5,000hours
Volt./Cap.Range: 400~450Vdc/120~1,200 μF



Aluminum Capacitors **小形, 薄型化対応**

HXW series

Temp./Life: 105°C/2,000~3,000hours
Volt./Cap.Range: 400~500Vdc/22~270 μF

CXW series

Temp./Life: 105°C/5,000hours
Volt./Cap.Range: 180~500Vdc/10~680 μF

LXW series

Temp./Life: 105°C/10,000~12,000hours
Volt./Cap.Range: 400~500Vdc/18~220 μF



Film Capacitors

小形品・低うなり音

MPY series

Temp.Range: -40~+105°C
Volt./Cap.Range: 450Vdc/0.47~10 μF

MPK series

Temp.Range: -40~+105°C (85°C)
Volt./Cap.Range: 450~800Vdc/0.1~4.7 μF

コロナ放電特性改善品

MPE series

Temp.Range: -40~+105°C
Volt.Range: 800Vdc/250Vac~1,600Vdc/700Vac
Cap.Range: 0.001~0.56 μF



Aluminum Capacitors

小形化, 長寿命, 低インピーダンス品

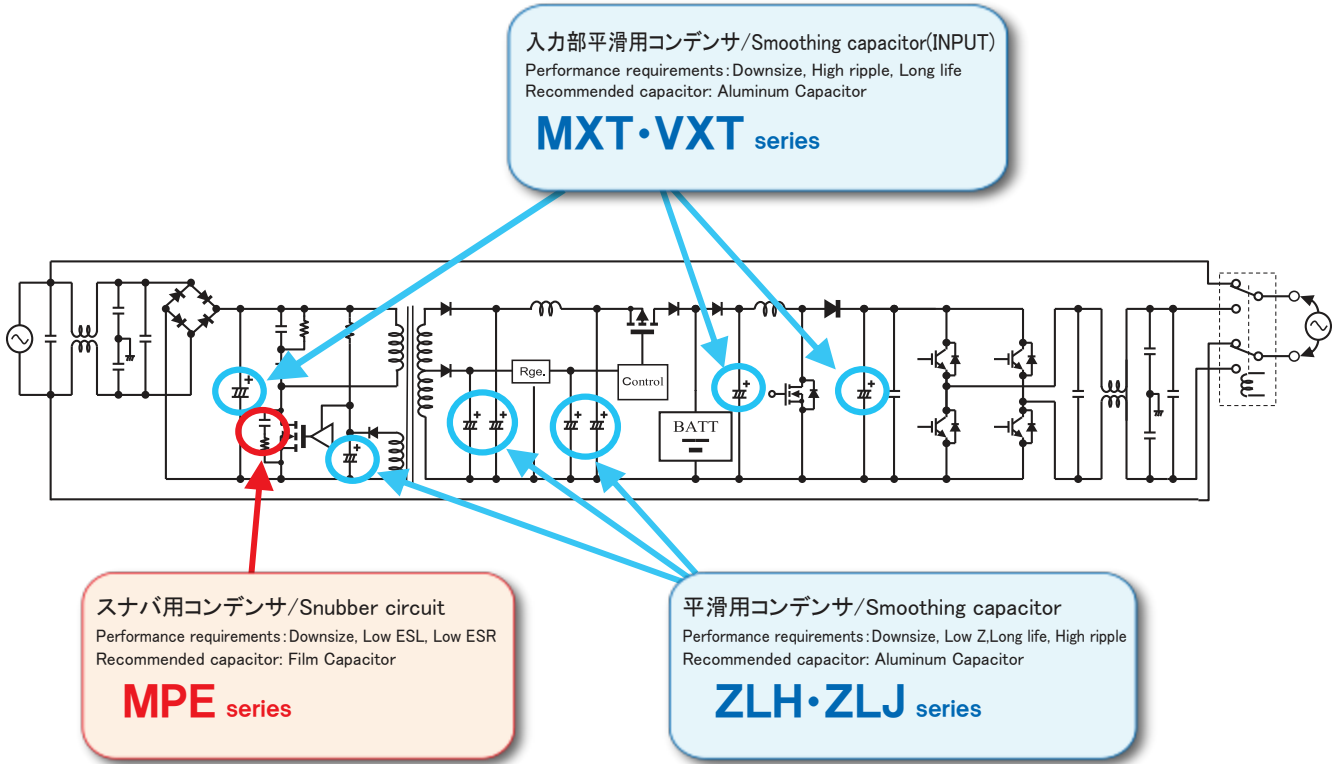
ZLJ series

Temp./Life: 105°C/6,000~10,000hours
Volt./Cap.Range: 6.3~120Vdc/8.2~8,200 μF

ZLQ series

Temp./Life: 105°C/3,000~6,000hours
Volt./Cap.Range: 6.3~35Vdc/56~12,000 μF





Uninterruptible Power Supply

Aluminum Capacitors

超小形化品

MXT series

Temp./Life: 105°C/3,000hours
Volt./Cap.Range: 400~450Vdc/150~1,500 μF

VXT series

Temp./Life: 105°C/5,000hours
Volt./Cap.Range: 400~450Vdc/120~1,200 μF



Aluminum Capacitors

小形化, 長寿命, 低インピーダンス品

ZLJ series

Temp./Life : 105°C/6,000~10,000hours
Volt./Cap.Range: 6.3~120Vdc/8.2~8,200 μF

ZLH series

Temp./Life : 105°C/6,000~10,000hours
Volt./Cap.Range: 6.3~100Vdc/8.2~8,200 μF



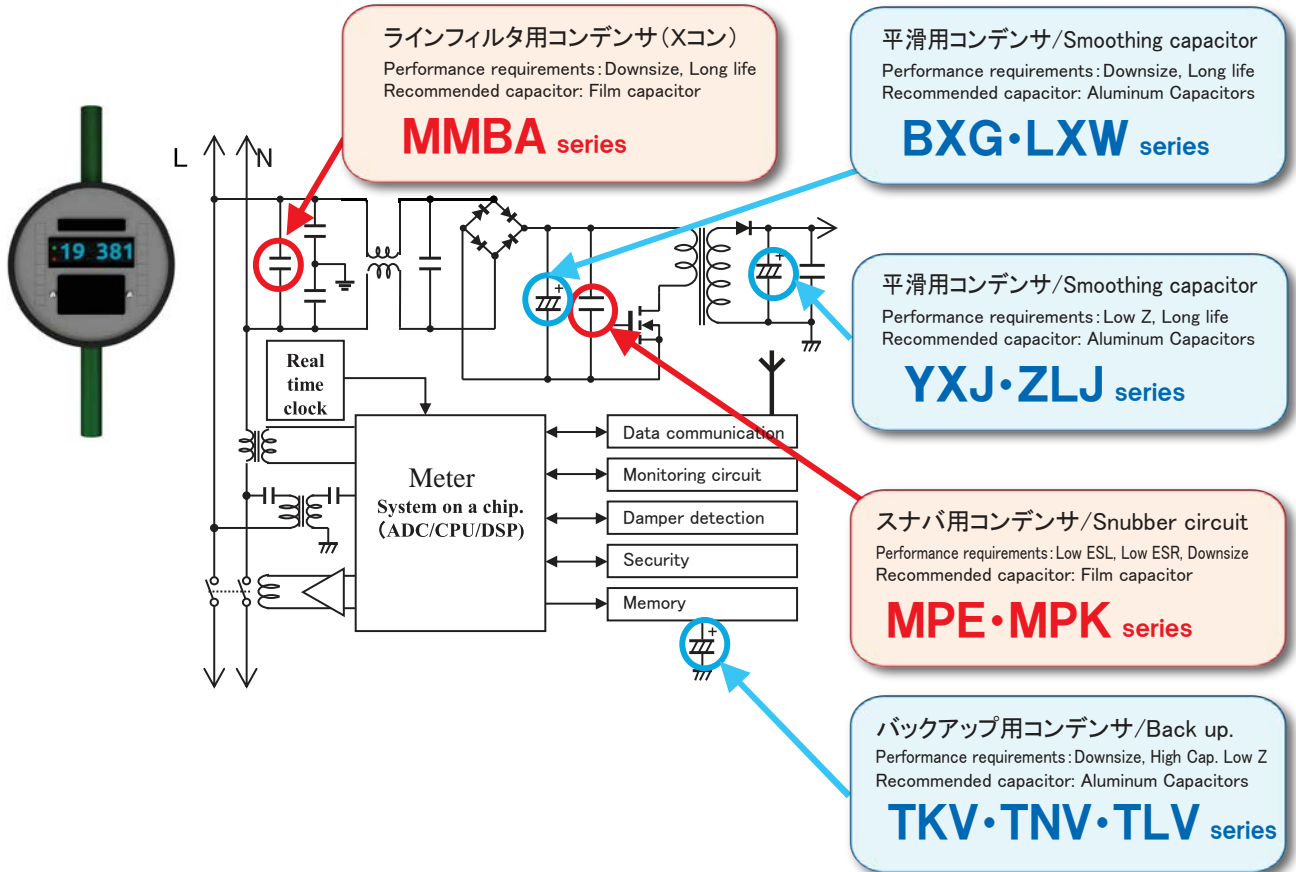
Film Capacitors

コロナ放電特性改善品

MPE series

Temp.Range: -40~+105°C
Volt. Range: 800Vdc/250Vac~1,600Vdc/700Vac
Cap. Range: 0.001~0.56 μF





Smart Meter

Film Capacitors

MMBA series 小形, 低うなり音, ACライン用

Temp. Range : -40~+85℃
Volt./Cap. Range: 125, 250Vac/0.01~1 μF

MPE series コロナ放電特性改善品

Temp. Range : -40~+105℃
Volt. Range : 800Vdc/250Vac~1,600Vdc/700Vac
Cap. Range : 0.001~0.56 μF

MPK series 小形化品, 低うなり音

Temp. Range : -40~+105℃ (85℃)
Volt./Cap. Range: 450~800Vdc/0.1~4.7 μF



Aluminum Capacitors

小形化, 長寿命品



BXG series

Temp./Life : 105℃/10,000~12,000hours
Volt./Cap. Range: 160~450Vdc/8.2~270 μF

LXW series

Temp./Life : 105℃/10,000~12,000hours
Volt./Cap. Range: 400~500Vdc/18~220 μF

Aluminum Capacitors

小形, 高容量, 低Z, 長寿命品

TKV series

Temp./Life : 105℃/2,000hours
Volt./Cap. Range: 6.3~35Vdc/33~1,800 μF

TNV series

Temp./Life : 105℃/3,000~5,000hours
Volt./Cap. Range: 6.3~35Vdc/330~2,200 μF

TLV series

Temp./Life : 105℃/2,000~5,000hours
Volt./Cap. Range: 6.3~100Vdc/22~10,000 μF



Aluminum Capacitors

小形, 低Z, 高リップル電流, 長寿命品

YXJ series

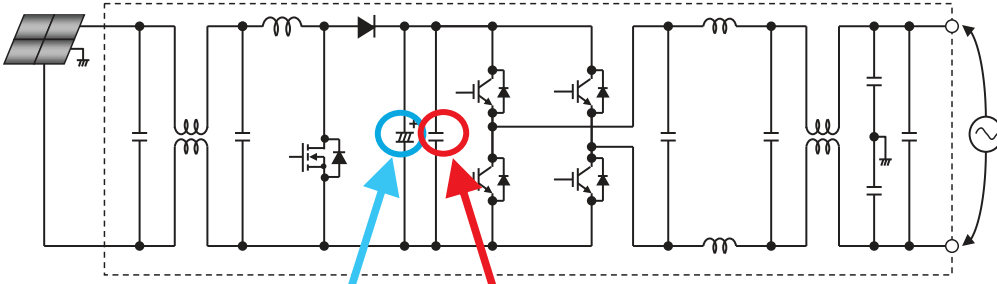
Temp./Life : 105℃/4,000~10,000hours
Volt./Cap. Range: 6.3~100Vdc/1~15,000 μF

ZLJ series

Temp./Life : 105℃/6,000~10,000hours
Volt./Cap. Range: 6.3~120Vdc/8.2~8,200 μF



Solar Photovoltaics



平滑用コンデンサ/Smoothing capacitor
Performance requirements: High cap., Long life, Overvoltage
Recommended capacitor: Aluminum Capacitor

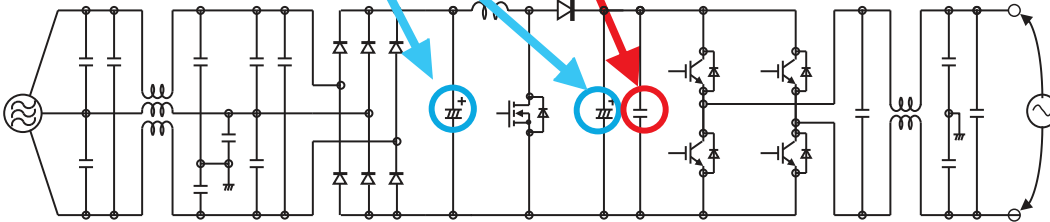
MXH・VXH series

スナバ用コンデンサ/Snubber circuit
Performance requirements: Low ESL, Low ESR, High ripple
Recommended capacitor: Film Capacitor

MPH・PCK series HPB series



Wind Power



Solar Photovoltaics / Wind Power

Aluminum Capacitors
105℃, 小形化, 3000h保証品

MXH series

Volt. : 400~550Vdc
Cap. : 56~1,200μF

●多端子形状も対応可能



Aluminum Capacitors
105℃, 小形化, 5000h保証品

VXH series

Volt. : 200~500Vdc
Cap. : 56~2,700μF

●多端子形状も対応可能



Film Capacitors
小形化, 大電流品

MPH series

Temp.Range: -40~+105℃
Volt./Cap.Range: 100~800Vdc/0.47~22μF

大電流, 低うなり音品

PCK series

Temp.Range: -40~+105℃ (85℃)
Volt./Cap.Range: 450~2,000Vdc/0.01~33μF



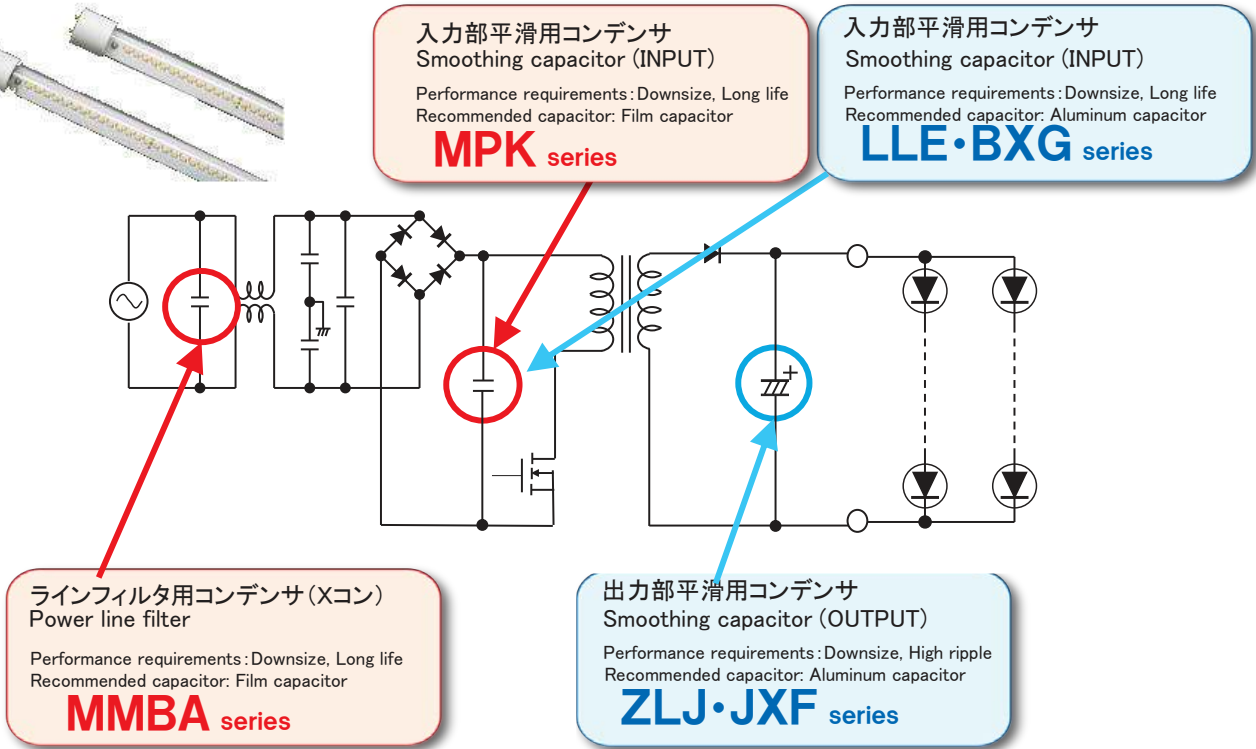
Polymer Multilayer Capacitors
高温, 優れた温特, 85℃85%RH対応品

HPB series (PMLCAP)

Temp.Range: -55~+125℃
Volt.Range: 500,900Vdc
Cap.Range: 10~25μF
Humidity : 85℃85%RH
1000hours



(1) LED 絶縁型 LED Light (insulated circuit)



入力部平滑用コンデンサ
Smoothing capacitor (INPUT)
Performance requirements: Downsize, Long life
Recommended capacitor: Film capacitor
MPK series

入力部平滑用コンデンサ
Smoothing capacitor (INPUT)
Performance requirements: Downsize, Long life
Recommended capacitor: Aluminum capacitor
LLE·BXG series

ラインフィルタ用コンデンサ (Xコン)
Power line filter
Performance requirements: Downsize, Long life
Recommended capacitor: Film capacitor
MMBA series

出力部平滑用コンデンサ
Smoothing capacitor (OUTPUT)
Performance requirements: Downsize, High ripple
Recommended capacitor: Aluminum capacitor
ZLJ·JXF series

Straight tube LED (insulated circuit)

Aluminum Capacitors
小形化, 長寿命品

BXG series
Temp./Life : 105°C/10,000~12,000hours
Volt./Cap.Range: 160~450Vdc/8.2~270µF

LLE series
Temp./Life : 105°C/12,000~20,000hours
Volt./Cap.Range: 160~450Vdc/1~68µF

Aluminum Capacitors
小形化, 長寿命, 低Z品

ZLJ series
Temp./Life : 105°C/6,000~10,000hours
Volt./Cap.Range: 6.3~120Vdc/8.2~8,200µF

JXF series
Temp./Life : 105°C/6,000~8,000hours
Volt./Cap.Range: 16~100Vdc/68~10,000µF

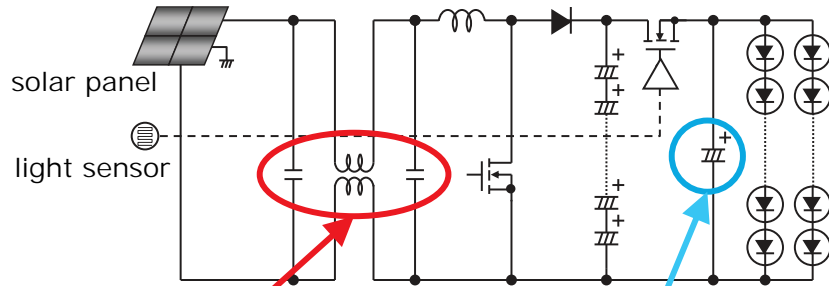
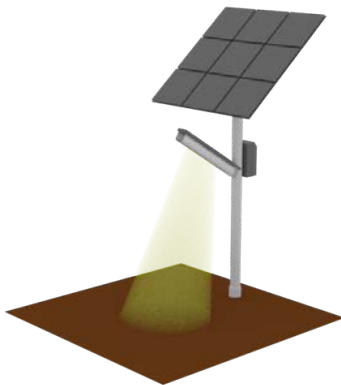
Film Capacitors
小形化 ACライン雑音防止用

MMBA series
Temp.Range: -40~+85°C
Volt.Range: 125, 250Vdc
Cap.Range: 0.01~1µF

Film Capacitors
小形化品

MPK series
Temp.Range: -40~+105°C (85°C)
Volt.Range: 450~800Vdc
Cap.Range: 0.1~4.7µF

(2) 街路灯 Street light



DCリンク用コンデンサ/DC Link
Performance requirements: Downsize, Long life
Recommended capacitor: Film capacitor

MPK series

出力部平滑用コンデンサ
Smoothing capacitor (OUTPUT)
Performance requirements: High ripple, Long life
Recommended capacitor: Aluminum Capacitor

JXF・ZLJ series

Street light

Film Capacitors
小形化品

MPK series

Temp.Range: $-40 \sim +105^{\circ}\text{C}$ (85 $^{\circ}\text{C}$)

Volt.Range: 450~800Vdc

Cap.Range: 0.1~4.7 μF



Aluminum Capacitors

小形, 低Z, 高リップル電流, 長寿命品

ZLJ series

Temp./Life : 105 $^{\circ}\text{C}$ /6,000~10,000hours

Volt./Cap.Range: 6.3~120Vdc/8.2~8,200 μF



Aluminum Capacitors

小形化, 低Z, 高リップル,
低温特性改善

JXF series

Temp.Range: $-55 \sim +105^{\circ}\text{C}$

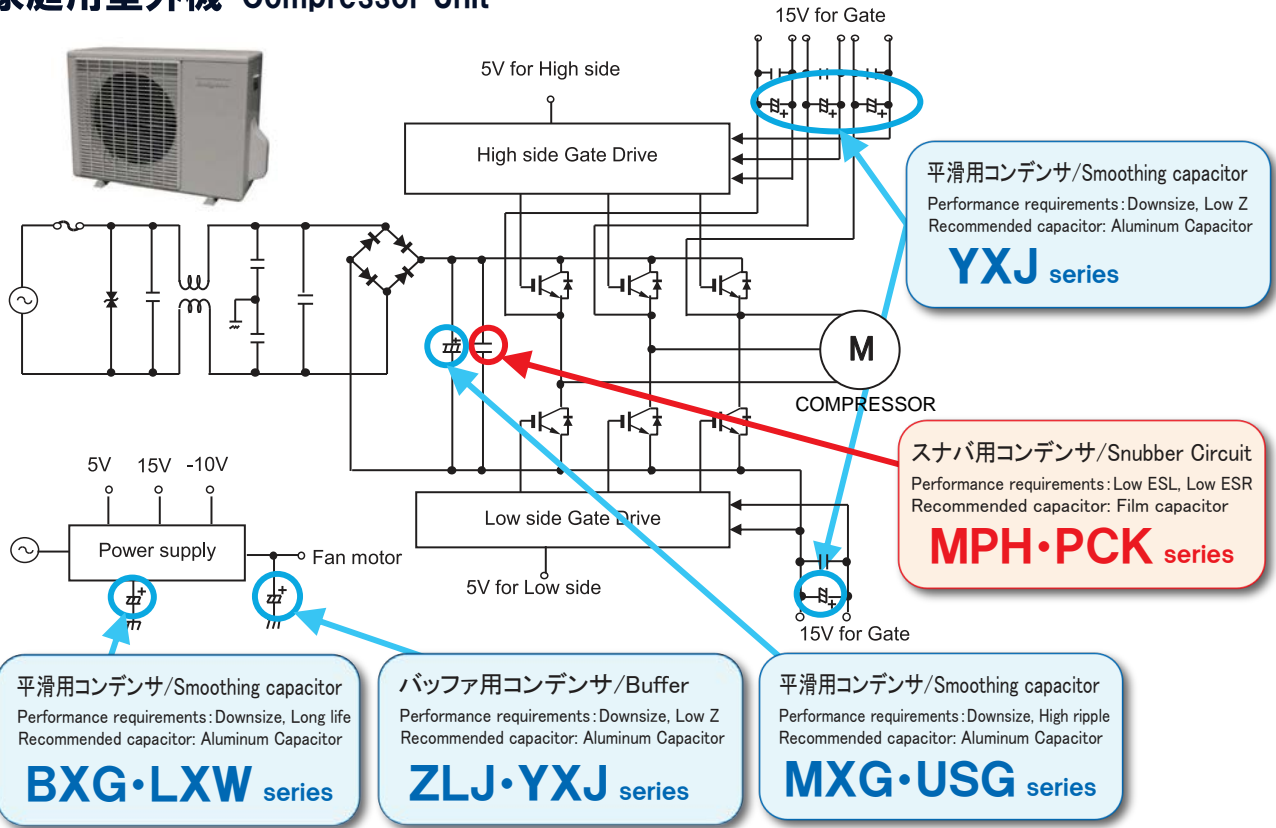
Life Time: 6,000~8,000hours

Volt.Range: 16~100Vdc

Cap.Range: 68~10,000 μF



(1) 家庭用室外機 Compressor Unit



Compressor Unit

Aluminum Capacitors

小形化品

MXG series

Temp./Life: 105°C/3,000hours
Volt./Cap.Range: 10~500Vdc/39~68,000 μF

USG series

Temp./Life: 85°C/3,000hours
Volt./Cap.Range: 10~450Vdc/68~82,000 μF



Aluminum Capacitors

小形化, 長寿命, 低インピーダンス品

ZLJ series

Temp./Life: 105°C/6,000~10,000hours
Volt./Cap.Range: 6.3~120Vdc/8.2~8,200 μF

YXJ series

Temp./Life: 105°C/4,000~10,000hours
Volt./Cap.Range: 6.3~100Vdc/1~15,000 μF



Film Capacitors

小形化 大電流品

MPH series

Temp.Range: -40~+105°C
Volt./Cap.Range: 100~800Vdc/0.047~22 μF

大電流, 低うなり音品

PCK series

Temp.Range: -40~+105°C (85°C)
Volt./Cap.Range: 450~2,000Vdc/0.01~33 μF



Aluminum Capacitors

小形化, 長寿命品

BXG series

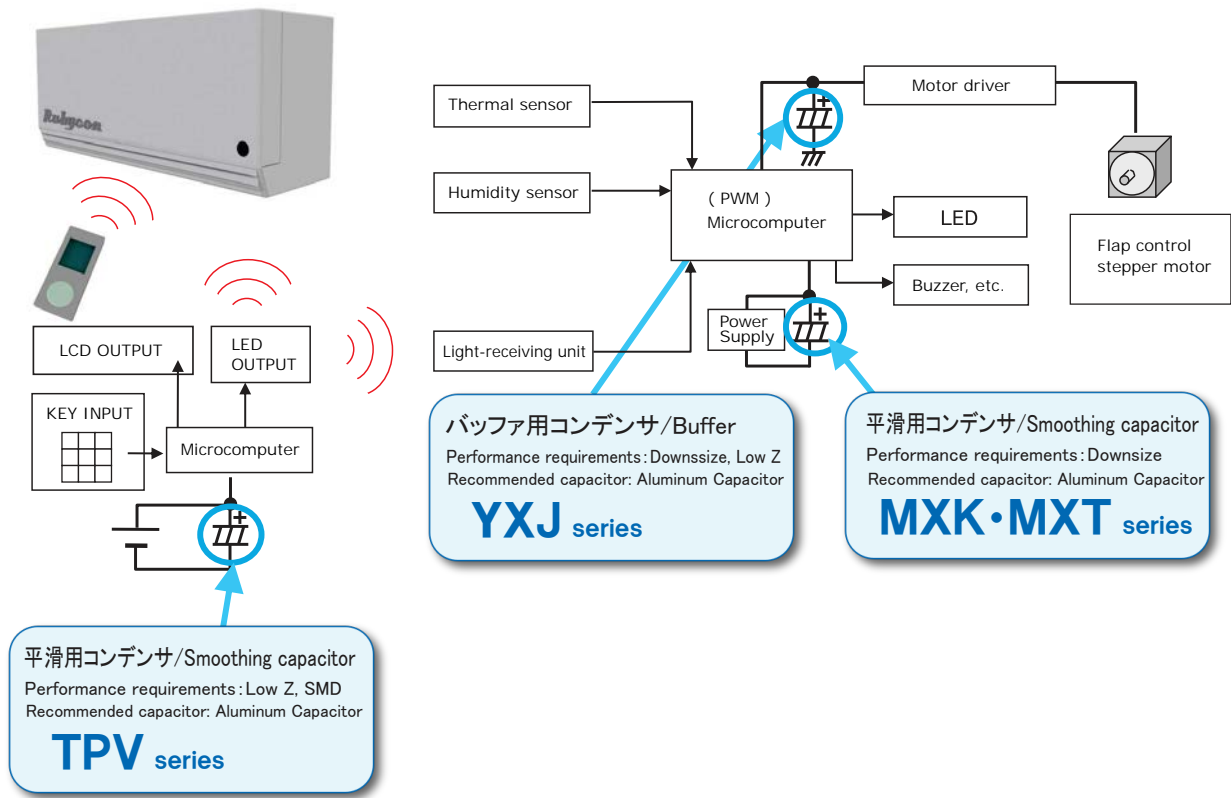
Temp./Life: 105°C/10,000~12,000hours
Volt./Cap.Range: 160~450Vdc/8.2~270 μF

LXW series

Temp./Life: 105°C/10,000~12,000hours
Volt./Cap.Range: 400~500Vdc/18~220 μF



(2) 家庭用室内機 Air conditioner Cooling Unit



Air conditioner Cooling Unit

Aluminum Capacitors
105°C, 3,000h 保証, 超小形化品

MXK series

Temp./Life: 105°C/3,000hours
Volt./Cap.Range: 16~500Vdc/68~82,000 μF



Aluminum Capacitors
小形化, 長寿命, 低インピーダンス品

YXJ series

Temp./Life: 105°C/4,000~10,000hours
Volt./Cap.Range: 6.3~100Vdc/1~15,000 μF



Aluminum Capacitors
105°C, 3,000h 保証, 超小形化品

MXT series

Temp./Life: 105°C/3,000hours
Volt./Cap.Range: 400~450Vdc/150~1,500 μF

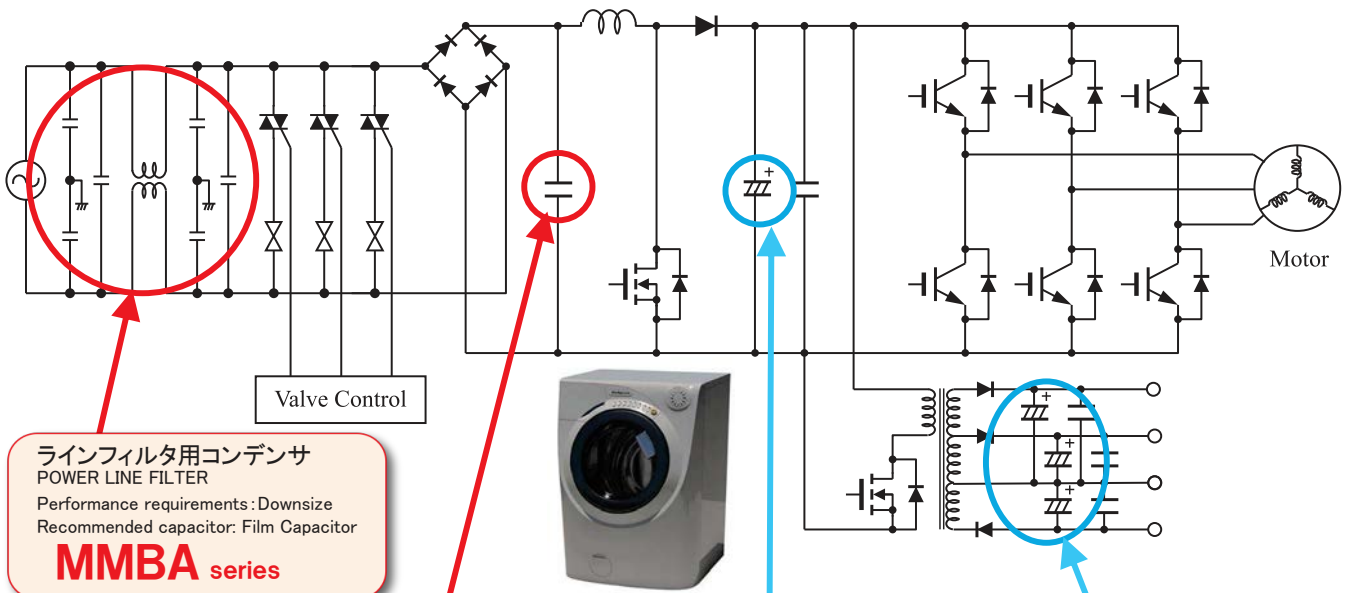


Aluminum Capacitors
小形化, 低ESR品, SMD

TPV series

Temp./Life: 105°C/2,000hours
Volt./Cap.Range: 6.3~50Vdc/47~2,200 μF





ラインフィルタ用コンデンサ
POWER LINE FILTER
Performance requirements: Downsize
Recommended capacitor: Film Capacitor
MMBA series

平滑用コンデンサ/Smoothing capacitor
Performance requirements: Low ESL, Low ESR
Recommended capacitor: Film Capacitor
MPK・PCK・MPH series

平滑用コンデンサ/Smoothing capacitor
Performance requirements: Downsize, High ripple,
Recommended capacitor: Aluminum Capacitor
USG・MXG series


平滑用コンデンサ/Smoothing capacitor
Performance requirements: Downsize, Low Z
Recommended capacitor: Aluminum Capacitor
YXJ series

Washing Machine

Aluminum Capacitors
小形化, 長寿命, 低インピーダンス品
YXJ series
Temp./Life: 105°C/4,000~10,000hours
Volt./Cap.Range: 6.3~100Vdc/1~15,000 μF



Film Capacitors
MPH series
Temp.Range: -40~+105°C
Volt./Cap.Range: 100~800Vdc/0.047~22 μF
PCK series
Temp.Range: -40~+105°C (85°C)
Volt./Cap.Range: 450~2,000Vdc/0.01~33 μF
MPK series
Temp.Range: -40~+105°C (85°C)
Volt./Cap.Range: 450~800Vdc/0.1~4.7 μF



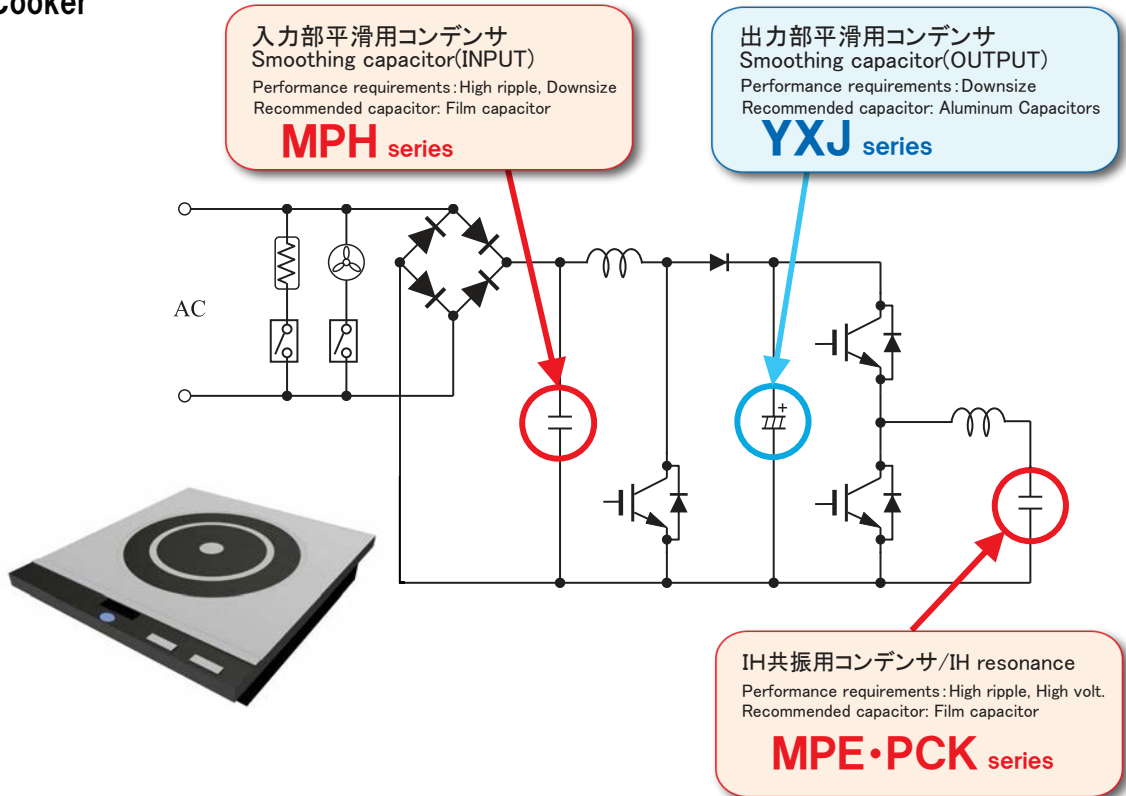
Aluminum Capacitors
小形化品
MXG series
Temp./Life: 105°C/3,000hours
Volt./Cap.Range: 10~500Vdc/39~68,000 μF
USG series
Temp./Life: 85°C/3,000hours
Volt./Cap.Range: 10~450Vdc/68~82,000 μF



Film Capacitors
小形化 ACライン雑音防止用
MMBA series
Temp.Range: -40~+85°C
Volt.Range: 125, 250Vac
Cap.Range: 0.01~1 μF



Induction Cooker



Induction Cooker

Film Capacitors
小形化, 大電流品
MPH series
Temp.Range: -40~+105℃
Volt.Range: 100~800Vdc
Cap.Range: 0.047~22 μF



Film Capacitors
コロナ放電特性改善品
MPE series
Temp.Range: -40~+105℃
Volt.Range: 800Vdc/250Vac, 1,250Vdc/400Vac
1,600Vdc/700Vac
Cap.Range: 0.001~0.56 μF



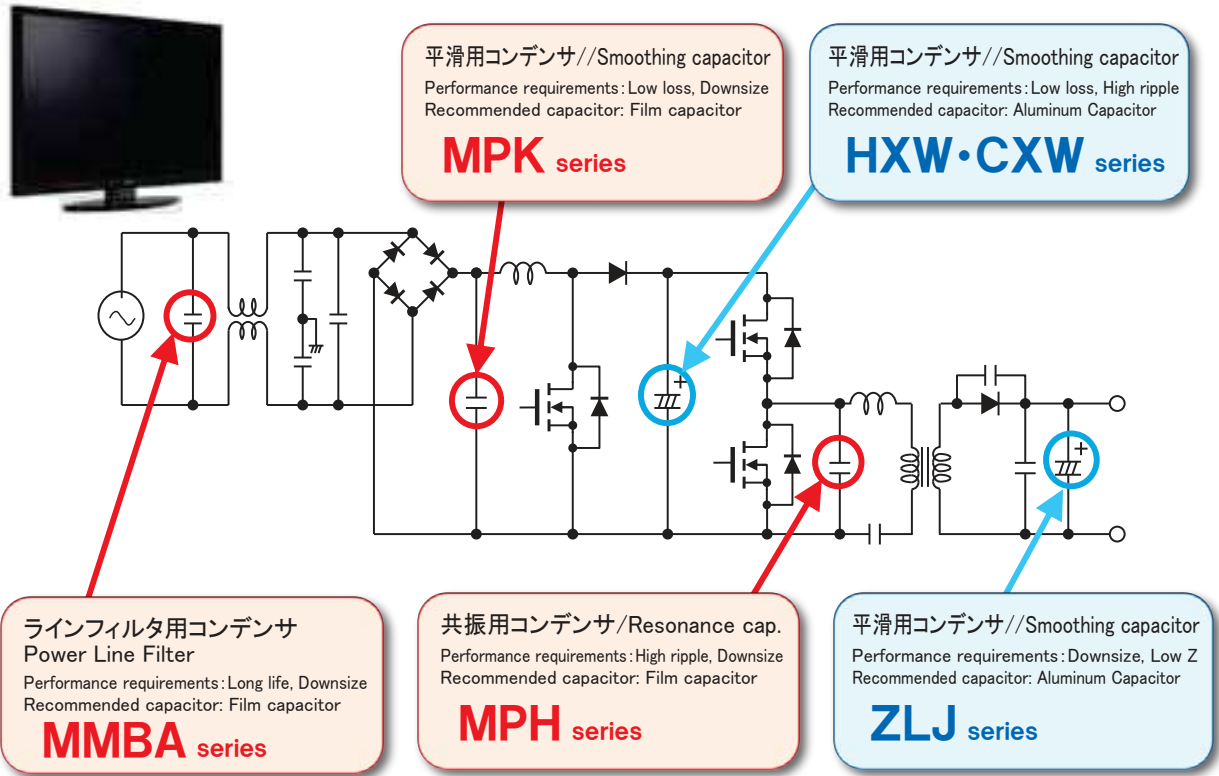
Aluminum Capacitors
小形化, 長寿命, 低インピーダンス品
YXJ series
Temp./Life : 105℃/4,000~10,000hours
Volt./Cap.Range: 6.3~100Vdc/1~15,000 μF



Film Capacitors
小形化, 大電流品
PCK series
Temp.Range: -40~+105℃ (85℃)
Volt.Range: 450~2,000Vdc
Cap.Range: 0.01~33 μF




(1) 電源回路部 Power Supply Circuit



Flat Panel Display TV

Film Capacitors
小形化, ACライン雑音防止用
MMBA series
Temp.Range : -40~+85℃
Volt./Cap.Range: 125, 250Vac/0.01~1μF

小形化品, 低うなり音
MPK series
Temp.Range : -40~+105℃ (+85℃)
Volt./Cap.Range: 450~800Vdc/0.1~4.7μF



Film Capacitors
小形化, 大電流品
MPH series
Temp.Range: -40~+105℃
Volt.Range: 100~800Vdc
Cap.Range: 0.047~22μF



Aluminum Capacitors
超小形化品, 長L品
HXW series
Temp./Life : 105℃/2,000~3,000hours
Volt./Cap.Range: 400~500Vdc/22~270μF

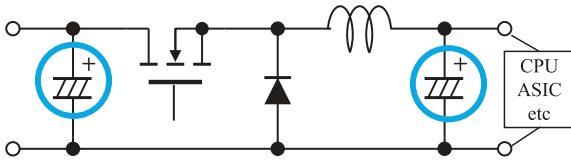
CXW series
Temp./Life : 105℃/5,000hours
Volt./Cap.Range: 180~500Vdc/10~680μF



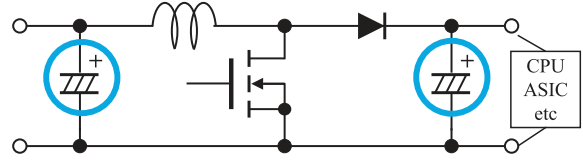
Aluminum Capacitors
小形, 低Z, 高リップル電流, 長寿命品
ZLJ series
Temp./Life : 105℃/6,000~10,000hours
Volt./Cap.Range: 6.3~120Vdc/8.2~8,200μF



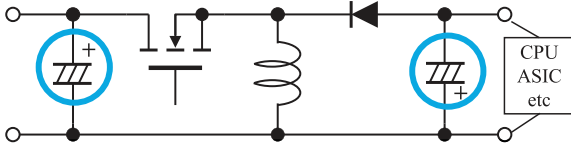
〔 降圧チョッパ回路 〕
Buck Converter



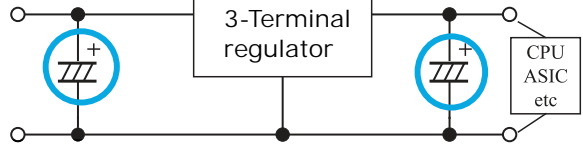
〔 昇圧チョッパ回路 〕
Boost Converter



〔 反転チョッパ回路 〕
Buck-boost Converter



〔 ドロップ回路 〕
Dropper circuit



平滑用コンデンサ/Smoothing capacitor

Performance requirements: High ripple, Low ESR, Downsize

Recommended capacitor:

Conductive Polymer Hybrid Type **PEV・PZE series**

Aluminum Capacitors (SMD) **TPV・TNV・TYV series**

Aluminum Capacitors (Lead wire) **ZLQ・ZLJ series**



DC/DC Converter

Conductive Polymer Hybrid Type
105℃, 低ESR, 高リップル, 高耐圧品
PZE series

Temp./Life: -55~+105℃/10,000hours
Volt./Cap.Range: 25~80Vdc/22~330 μF



Aluminum Capacitors
小形化, 高リップル, 低ESR品
TPV series

Temp./Life: 105℃/2,000hours
Volt./Cap.Range: 6.3~50Vdc/47~2,200 μF

TNV series
Temp./Life: 105℃/3,000~5,000hours
Volt./Cap.Range: 6.3~35Vdc/330~2,200 μF

TYV series
Temp./Life: 105℃/8,000hours
Volt./Cap.Range: 25,35Vdc/330~820 μF



Conductive Polymer Hybrid Type
105℃, 低ESR, 高リップル, 高耐圧品, SMD
PEV series

Temp./Life: -55~+105℃/10,000hours
Volt./Cap.Range: 25~80Vdc/10~330 μF



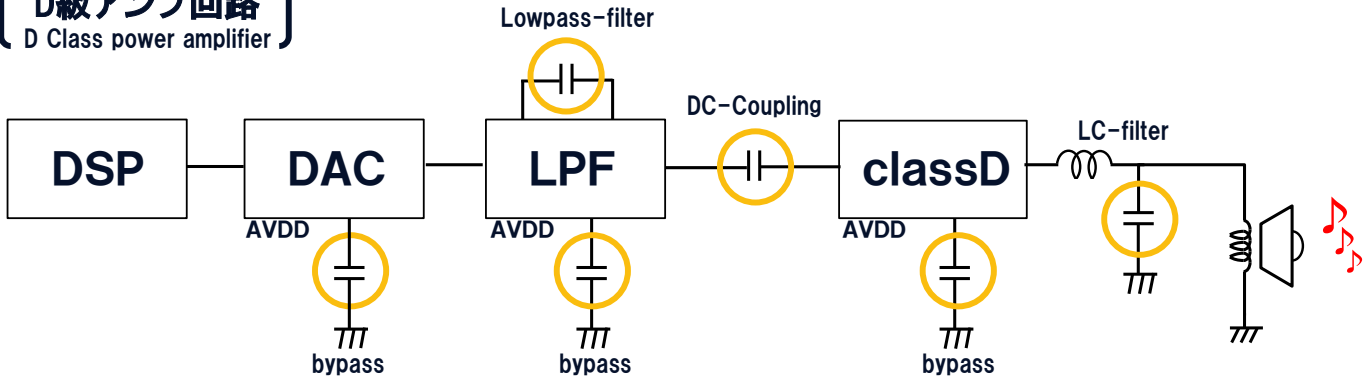
Aluminum Capacitors
小形化, 高リップル, 低インピーダンス品
ZLQ series

Temp./Life: 105℃/3,000~6,000hours
Volt./Cap.Range: 6.3~35Vdc/56~12,000 μF

ZLJ series
Temp./Life: 105℃/6,000~10,000hours
Volt./Cap.Range: 6.3~120Vdc/8.2~8,200 μF



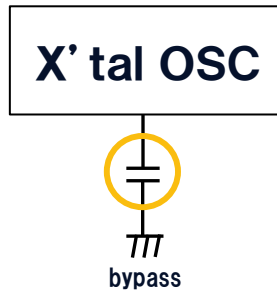
(D級アンプ回路)
D Class power amplifier



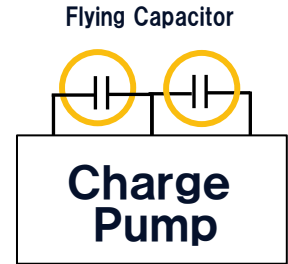
DCカップリングコンデンサ/DC coupling capacitor
Performance requirements: Downsize, Low ESR, High-quality sound
Recommended capacitor: Polymer Multilayer Capacitor

PML-CAP **MU・MS・NS** series

(X'tal OSC回路)
X'tal OSC



(チャージポンプ回路)
Charge Pump

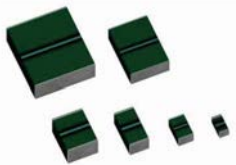


Polymer Multilayer Capacitors
高温度, 優れた温特, 低うなり音, 小形化品

MU series (PMLCAP)

Temp.Range: -55~+125℃

Volt./Cap.Range: 16~200Vdc/0.0001~22 μF

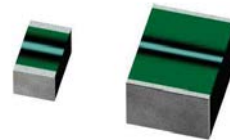


Polymer Multilayer Capacitors
85℃85%RH対応品

MS series (PMLCAP)

Temp.Range: -55~+125℃

Volt./Cap.Range: 10~50Vdc/0.001~2.2 μF

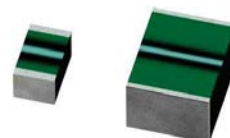


Polymer Multilayer Capacitors
60℃90%RH対応品

NS series (PMLCAP)

Temp.Range: -55~+125℃

Volt./Cap.Range: 16~63Vdc/0.001~10 μF





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TEL:0265-72-7111 FAX:0265-73-2914

営業本部

〒399-4593 長野県伊那市西箕輪1938-1
TEL:0265-72-7114 FAX:0265-76-5282

国内営業部・東京支店

〒171-0022 東京都豊島区南池袋2-30-8友泉南池袋ビル4F
TEL:03-5396-5001 FAX:03-5396-1190

名古屋支店

〒463-0072 愛知県名古屋市守山区金屋1-12-19
TEL:052-793-1210 FAX:052-791-1481

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