

ALUMINUM ELECTROLYTIC CAPACITORS
for AUTOMOTIVE APPLICATION



Recommended series for automotive application

| Category | Series | Feature | Category Temp. Range °C | | Rated Voltage Range V.DC | | Rated Capacitance Range μ F | | Reliability | | | | | | | | | | | | | | |
|--------------------|---|---|-------------------------|------|--------------------------|-------|---------------------------------|--------|---------------------|---------|---------|---------|---------|---------|---------|-----------------|---------|---------|---------|---------|---------|--|--|
| | | | Max. | Min. | Max. | Min. | Max. | Min. | Guaranteed lifetime | | | | | | | | | | | | | | |
| | | | | | | | | | 65°C | | 70°C | | 85°C | | 105°C | | 125°C | | | | | | |
| | | | | | | | | | 1000hrs | 1500hrs | 1000hrs | 1000hrs | 1000hrs | 2000hrs | 3000hrs | 5000hrs or more | 1000hrs | 2000hrs | 3000hrs | 4000hrs | 5000hrs | | |
| Hybrid Polymer | HV | Low ESR Hybrid Polymer Chip | +105 | -55 | 80 | 25 | 680 | 22 | | | | | | | | | | | | | | | |
| | HT | Low ESR Hybrid Polymer Chip, Vibration resistance | +105 | -55 | 80 | 25 | 680 | 22 | | | | | | | | | | | | | | | |
| | HVK | Low ESR, High Temp. Hybrid Polymer Chip | +125 | -55 | 63 | 25 | 680 | 22 | | | | | | | | | | | | | | | |
| | HTK | Low ESR, High Temp., Vibration resistance | +125 | -55 | 63 | 25 | 680 | 33 | | | | | | | | | | | | | | | |
| Surface Mount Type | RVE | 105°C, 4.5mmL | +105 | -40 | 50 | 6.3 | 100 | 0.22 | | | | | | | | | | | | | | | |
| | RVR | 105°C, Long Life, High CV | +105 | -40 | 50 | 4 | 1500 | 0.22 | | | | | | | | | | | | | | | |
| | RVD | 105°C, Low Impedance, Long life | +105 | -55 | 100 | 6.3 | 2200 | 4.7 | | | | | | | | | | | | | | | |
| | RZD | 105°C, Low Impedance, High CV | +105 | -55 | 35 | 6.3 | 2200 | 100 | | | | | | | | | | | | | | | |
| | RVV | 105°C, Low Impedance, Long life | +105 | -55 | 35 | 6.3 | 1500 | 4.7 | | | | | | | | | | | | | | | |
| | RVZ | 105°C, Low Impedance | +105 | -55 | 35 | 6.3 | 2700 | 4.7 | | | | | | | | | | | | | | | |
| | RZF | 125°C, Low ESR, Long Life, High CV | +125 | -40 | 35 | 10 | 680 | 47 | | | | | | | | | | | | | | | |
| | RVT | 125°C, Low ESR | +125 | -40 | 100 | 10 | 470 | 4.7 | | | | | | | | | | | | | | | |
| | RVX | 135°C, Higher Reliability | +135 | -40 | 35 | 25 | 330 | 22 | | | | | | | | | | | | | | | |
| | RTZ | 105°C, Low Z, High CV, 30G Vibration resistance | +105 | -55 | 35 | 6.3 | 8200 | 150 | | | | | | | | | | | | | | | |
| | RTD | 105°C, Low Z, High CV, 30G Vibration resistance | +105 | -55 | 100 | 6.3 | 8200 | 100 | | | | | | | | | | | | | | | |
| | RTT | 125°C, Low ESR, High CV, 30G Vibration resistance | +125 | -40 | 100 | 10 | 4700 | 47 | | | | | | | | | | | | | | | |
| | RYK | 125°C, Horizontal type | +125 | -40 | 63 | 6.3 | 820 | 56 | | | | | | | | | | | | | | | |
| Radial Type | RJM | 105°C, Long life, Low Impedance | +105 | -40 | 50 | 6.3 | 8200 | 27 | | | | | | | | | | | | | | | |
| | RJD | 105°C, Low ESR, High Ripple, Miniaturized | +105 | -55 | 100 | 6.3 | 18000 | 10 | | | | | | | | | | | | | | | |
| | RJE | 105°C, Low ESR, High Ripple, For Airbag | +105 | -55 | 35 | 25 | 11000 | 830 | | | | | | | | | | | | | | | |
| | RJK | 105°C, Low ESR, High Ripple, For Airbag | +105 | -55 | 35 | 25 | 14000 | 2500 | | | | | | | | | | | | | | | |
| | RKE | 125°C, Low Impedance, 40G Vibration resistance | +125 | -40 | 100 | 10 | 8200 | 100 | | | | | | | | | | | | | | | |
| | RKD | 125°C, Low ESR, Miniaturized | +105 | -40 | 100 | 10 | 8200 | 100 | | | | | | | | | | | | | | | |
| | RPK | 125°C, Low ESR, 30G Vibration resistance | +125 | -40 | 100 | 10 | 8200 | 220 | | | | | | | | | | | | | | | |
| | RQA | 150°C, Low ESR, Miniaturized | +150 | -40 | 63 | 10 | 4700 | 220 | | | | | | | | | | | | | | | |
| | RKC | 135°C, Low ESR, Miniaturized | +135 | -40 | 100 | 10 | 6800 | 220 | | | | | | | | | | | | | | | |
| For Audio | RVM | Chip Type 105°C, 2000h | +105 | -55 | 50 | 6.3 | 470 | 1 | | | | | | | | | | | | | | | |
| | RVW | Chip Type 105°C (PURECAP) | +105 | -55 | 50 | 6.3 | 470 | 0.33 | | | | | | | | | | | | | | | |
| | RW5 | 105°C, Miniaturized | +105 | -55 | 25 | 16 | 15000 | 100 | | | | | | | | | | | | | | | |
| EDLC | DVL | SMD, Low Resistance Type | +85 | -40 | 5.5 | - | 0.22F | 0.047F | | | | | | | | | | | | | | | |
| | DZN | Low Resistance Type | +70 | -25 | 2.7 | 2.5 | 200F | 1F | | | | | | | | | | | | | | | |
| | DU | High Power, Low Temperature Type | +65 | -40 | 2.7 | - | 33F | 1F | | | | | | | | | | | | | | | |
| | | | +85 | -40 | 2.3 | - | 33F | 1F | | | | | | | | | | | | | | | |
| DW | Large Capacitance, High Power, Low Temperature Type | +65 | -40 | 2.7 | - | 3000F | 650F | | | | | | | | | | | | | | | | |

| 2000hrs 3000hrs | | 150°C1000hrs | Low ESR | Vibration resistance | Power train | | | | Chassis | | | | | Comfortable equipment | | | | | Exterior equipment | | | | | Type | | | | | |
|--------------------|---|--------------|---------|----------------------|----------------|--------------------|---------------------|----------------------|--------------------|-----------------------|-------------------------|-------------------------------|------------------------------|----------------------------------|------------------------------|---------|--------------|---------|--------------------|-----------|----------------|----------------|--------------|------|-----------|-----------------|-------|-------------|--------------------|
| | | | | | Engine control | Electric fuel pump | Electric water pump | Transmission control | Engine cooling fan | Idling system back-up | Alternator regeneration | EPS (Electric power steering) | ABS (Anti-lock brake system) | ESC (Electric stability control) | EPB (Electric parking brake) | Air-Bag | Radar system | E-latch | Instrument panel | Car audio | Car navigation | Drive recorder | Power window | | Smart key | Air conditioner | Wiper | Door mirror | Immobilizer |
| ● | ● | | ● | ● | ● | ● | | ● | ● | ● | ● | | | | | ● | ● | | ● | ● | | | ● | ● | ● | ● | ● | HV | Hybrid Polymer |
| | | | ● | ● | | | | | | | | | | | | | | | | | | | | | | | ● | HT | |
| | | | ● | ● | ● | ● | | ● | ● | ● | ● | | | | | | | ● | | | | ● | ● | | | | | HVK | |
| | | | ● | ● | ● | ● | | ● | ● | ● | ● | | | | | | | | | | | | | | | | | HTK | |
| | | | | | | | | | | | | | | | ● | | ● | ● | ● | | | | | | | | | RVE | Surface Mount Type |
| | | | | | | | | | | | | | | | | ● | ● | ● | ● | | | | | | | | | RVR | |
| | | | ● | | | | | | | | ● | ● | ● | | ● | ● | ● | ● | | | | | | | | | ● | RVD | |
| | | | ● | | | | | | | | ● | ● | ● | | ● | ● | ● | ● | | | | | | | | | ● | RZD | |
| | | | ● | | | | | | | | ● | ● | ● | | ● | ● | ● | ● | | | | | | | | | ● | RZV | |
| | | | ● | | | | | | | | ● | ● | ● | | ● | ● | ● | ● | | | | | | | | | ● | RVZ | |
| | | | ● | ● | ● | ● | | ● | ● | ● | ● | ● | | ● | | | | | | | | | | | | | ● | RZF | |
| | | | ● | | | | | ● | ● | | ● | | ● | | | | | | | | | | ● | | | | | RVT | |
| | | | ● | | | | | | | ● | ● | | | | | | | | | | | | ● | | | | | RVX | |
| | | | ● | ● | | | | | | | | | | | | | | | | | | | ● | | | | | RTZ | |
| | | | ● | ● | | | | | | | | | | | | | | | | | | | ● | | | | | RTD | |
| | | | ● | ● | ● | | | | | | | | | | | | | | | | | | ● | | | | | RTT | |
| | | | ● | ● | | | | | | | | | | | | | | | | | | | | | | | | RWK | |
| | | | ● | | | | | | | | | | | | | | | | | | | ● | | | | | | RJM | |
| | | | ● | | | | | | | | | | | | | | | | | | | ● | | | | | | RJD | |
| | | | ● | | | | | | | | | ● | | | | | | | | | | | | | | | | RJE | |
| | | | ● | | | | | | | | | ● | | | | | | | | | | | | | | | | RJK | |
| | | | ● | ● | ● | ● | | ● | ● | | ● | | | | | | | | | | | | ● | | | | | RKE | |
| | | | ● | ● | ● | ● | | ● | ● | ● | ● | | | | | | | | | | | ● | ● | | | | | RKD | |
| | | | ● | ● | ● | ● | | ● | ● | | ● | | | | | | | | | | | ● | ● | | | | | RPK | |
| | | ● | ● | | | | | ● | ● | | | | | | | | | | | | | | | | | | | RQA | |
| ● | ● | | ● | | ● | ● | ● | ● | ● | | ● | | | | | | | | | | | | ● | | | | | RKC | |
| | | | | | | | | | | | | | | | ● | ● | ● | | | | | | | | | | | RVM | |
| | | | | | | | | | | | | | | | ● | ● | ● | | | | | | | | | | | RWW | |
| | | | | | | | | | | | | | | | ● | ● | ● | | | | | | | | | | | RW5 | |
| | | | | | | | | | | | | | | | ● | ● | ● | | | | | | | | | | | DVL | |
| | | | ● | | | | | | | | | | | ● | ● | ● | | | | | ● | ● | | | | | | DZN | |
| | | | ● | | | | | | | | | | | ● | ● | ● | | | | | ● | ● | | | | | | DU | |
| | | | ● | | | | | | | | | | | ● | ● | ● | | | | | ● | ● | | | | | | DW | |

Hybrid Polymer

Surface Mount Type

Radial Type

For Audio

EDLC

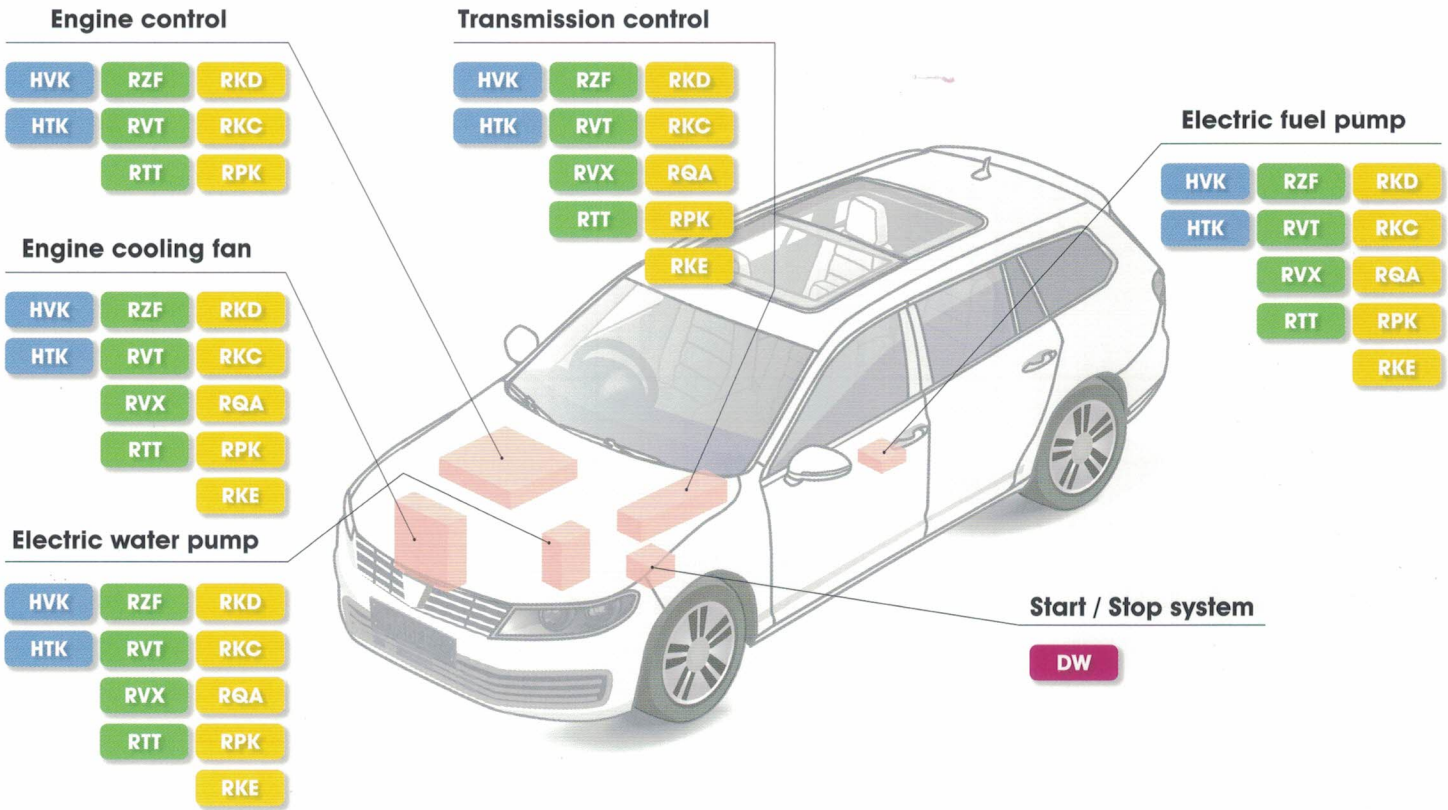
Power train

Hybrid

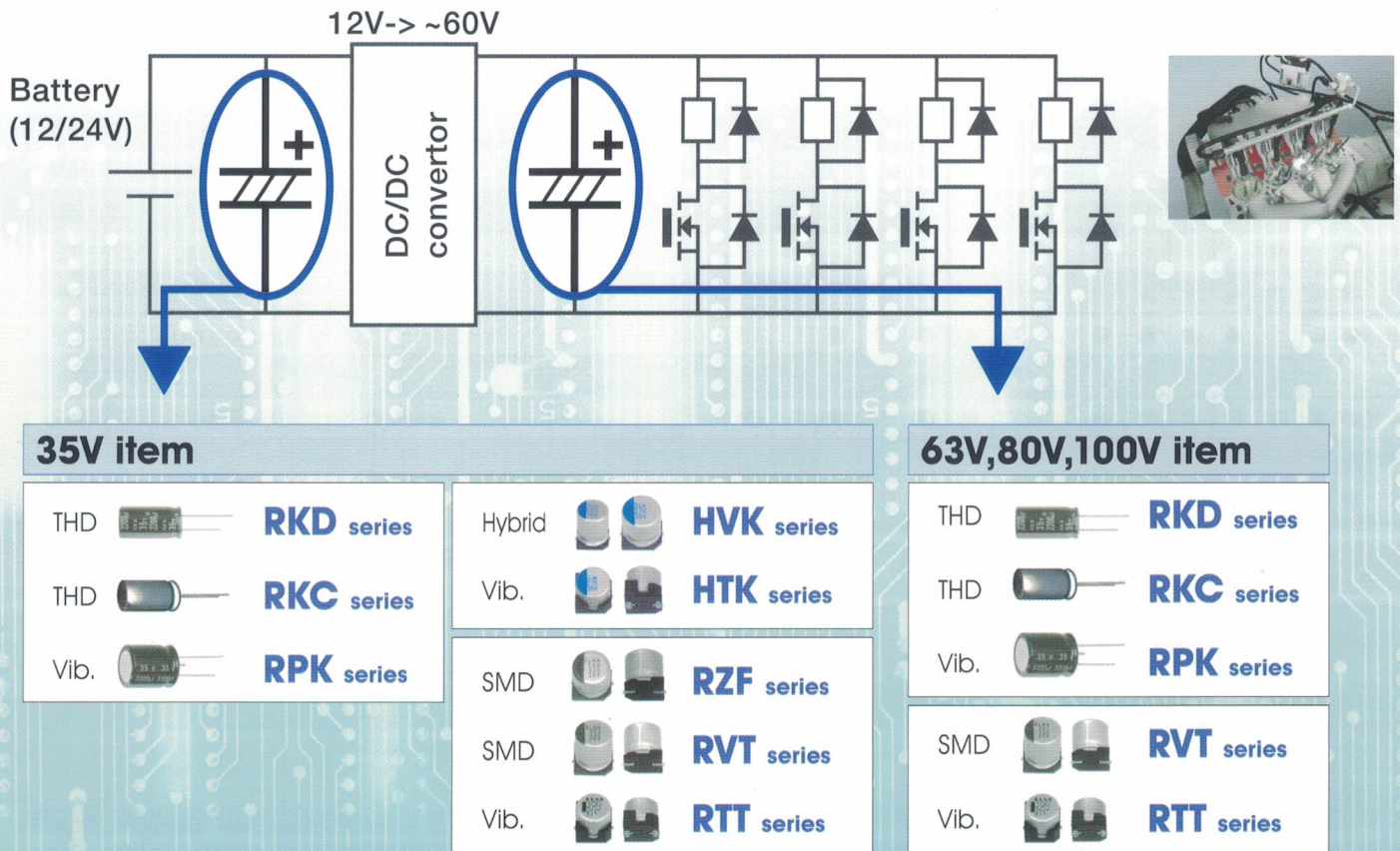
Chip

Radial

EDLC



Recommended Series for Engine control circuit

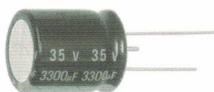


RKE



- Vibration resistance (40G, 10 to 2000Hz, X,Y,Z = per 2 hours)
- Guaranteed 5000 hours 125°C

RPK



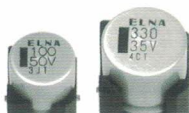
- NC terminal added items for vibration resistance (30G guaranteed: 20mmL or less)
- Guaranteed 5000 hours at 125°C

RVT



- High temperature and long life
- Guaranteed 2000 hours at 125°C (φ4 to φ8x6.5L : 1000h, φ12.5x13.5L : 5000h)

RTT



- Vibration resistance (30G guaranteed)
- Guaranteed 2000 hours at 125°C (φ12.5 or more : 5000h)

HTK



- Low ESR and high ripple current compare with aluminum electrolytic capacitor
- Guaranteed 4000 hours at 125°C

Example of Standard ratings

| Rated Voltage (V) | Cap (μF) | Case size | ESR | Rated ripple current |
|-------------------|----------|-------------|-----------|----------------------|
| | | | (mΩ max.) | (mA rms) |
| 25 | 33 | φ5x5.8L | 80 | 550 |
| | 56 | φ6.3x5.8L | 50 | 900 |
| | 100 | φ6.3x7.7L | 30 | 1400 |
| | 220 | φ8x10L | 27 | 1600 |
| | 330 | φ10x10L | 20 | 2000 |
| | 680 | φ12.5x13.5L | 15 | 3500 |
| 35 | 22 | φ5x5.8L | 100 | 550 |
| | 47 | φ6.3x5.8L | 60 | 900 |
| | 68 | φ6.3x7.7L | 35 | 1400 |
| | 150 | φ8x10L | 27 | 1600 |
| | 270 | φ10x10L | 20 | 2000 |
| | 470 | φ12.5x13.5L | 15 | 3500 |
| 50 | 10 | φ5x5.8L | 120 | 500 |
| | 22 | φ6.3x5.8L | 80 | 750 |
| | 33 | φ6.3x7.7L | 40 | 1100 |
| | 68 | φ8x10L | 30 | 1250 |
| | 100 | φ10x10L | 28 | 1600 |
| | 180 | φ12.5x13.5L | 20 | 3000 |
| 63 | 10 | φ6.3x5.8L | 120 | 700 |
| | 22 | φ6.3x7.7L | 80 | 900 |
| | 33 | φ8x10L | 40 | 1100 |
| | 56 | φ10x10L | 30 | 1400 |
| | 100 | φ12.5x13.5L | 22 | 2500 |

ESR: 100kHz, 20°C
Rated ripple current: 100kHz, 125°C

Characteristics comparison

| Item | Aluminum Electrolytic Capacitors | Conductive Polymer | Hybrid capacitors |
|---|----------------------------------|--------------------|---|
| ELNA series | RV | PVS | HV |
| Electrolyte | Electrolyte Liquid | Conductive Polymer | Conductive Polymer + Electrolyte Liquid |
| ESR (at 20c 100KHz) | 80mohm | 30mohm | 20mohm |
| DC Leakage Current(μA) | 0.01CV | 0.5CV | 0.01CV |
| Ripple Current(mA rms) | 850 | 1800 | 2500 |
| High Freq. Characteristics at Low Temp. | No good | Good | Good |

RKC



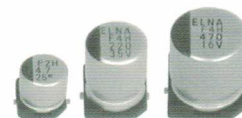
- Guaranteed 2000~3000 hours 135°C

RKD



- Guaranteed 5000 hours at 125°C (φ8 : 2000h, φ10 : 3000h)

RZF



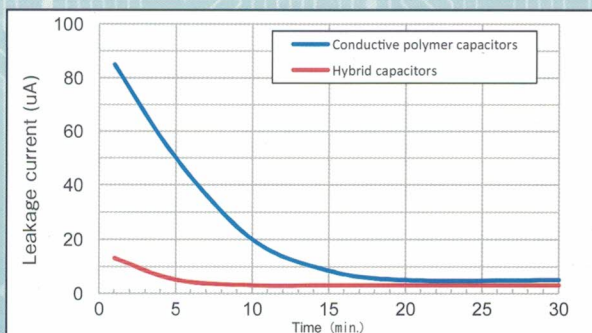
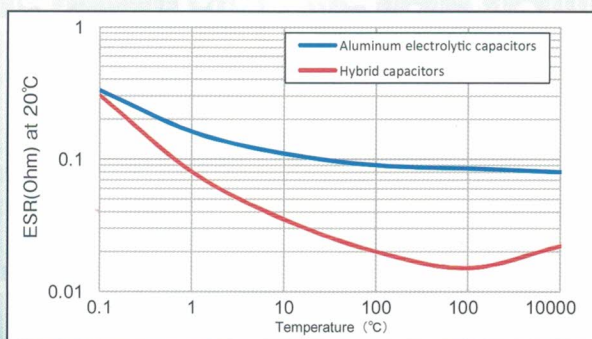
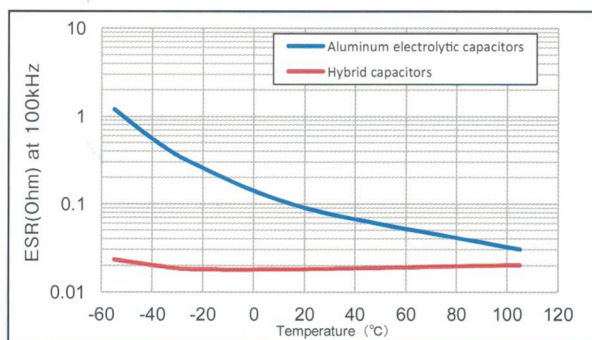
- Low ESR and Long life
- Guaranteed 2000 hours at 125°C (φ8, φ10 : 4000h)

DW



- Large Capacitance (3000F Max), For Low Temperature (-40°C)
- Guaranteed 1500 hours 65°C

Characteristics comparison



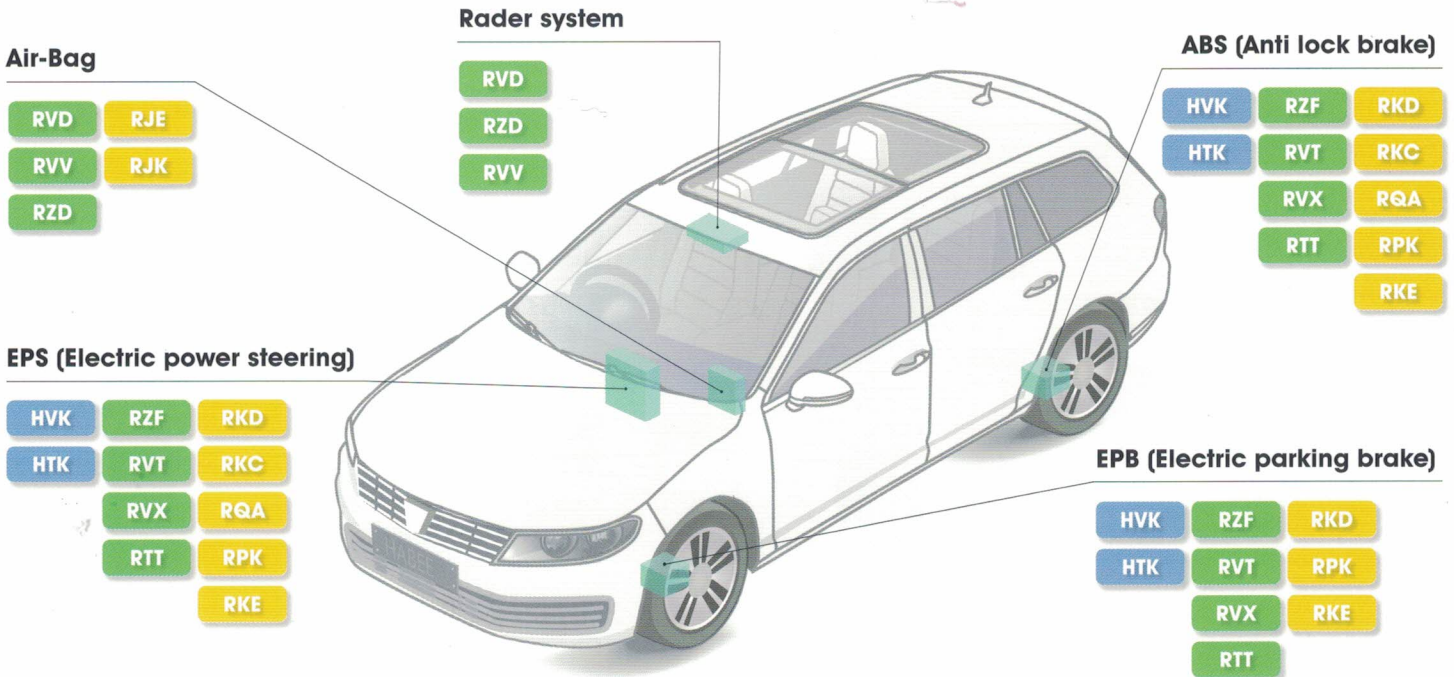
Note: For detailed specifications, please refer to ELNA general catalog.

Chassis

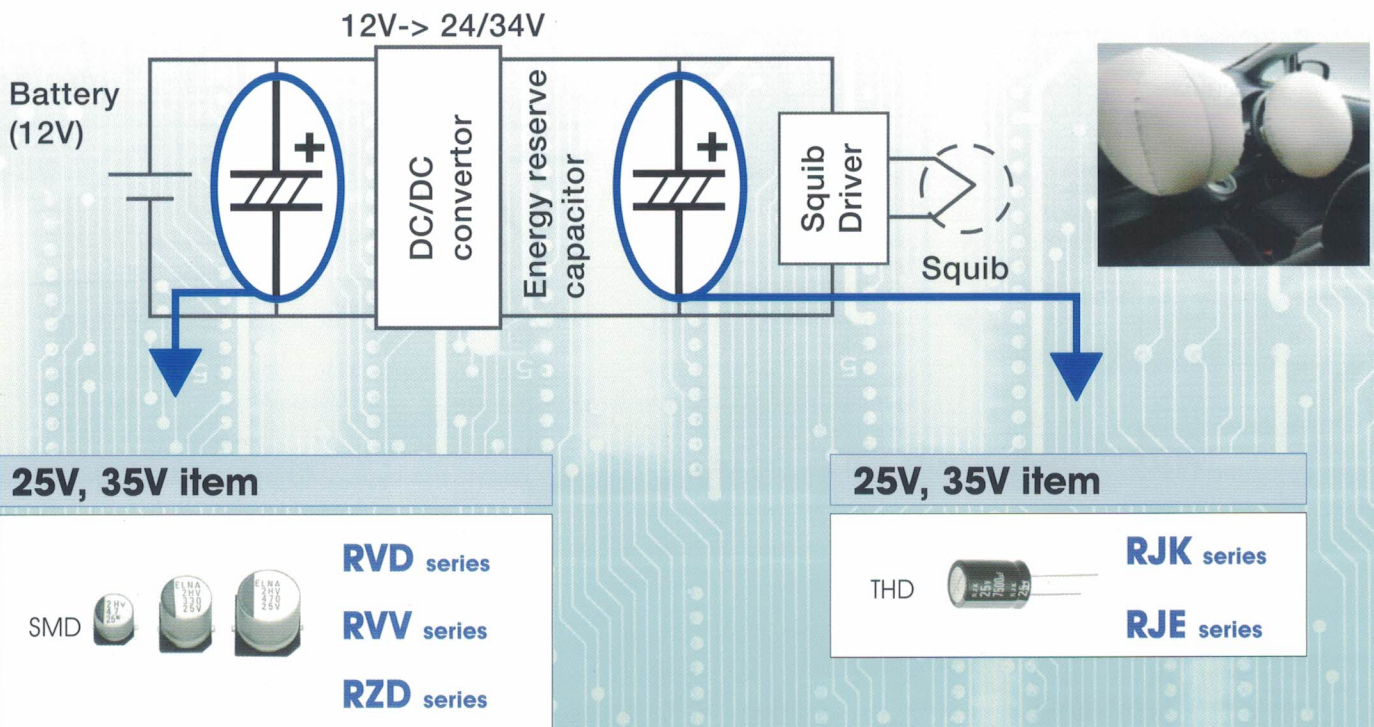
Hybrid

Chip

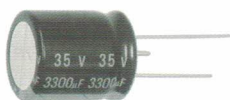
Radial



Recommended Series for Air-Bag circuit

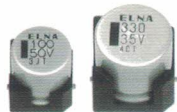


RPK



- NC terminal added for vibration resistance (30G guaranteed: 20mmL or less)
- Guaranteed 5000 hours at 125°C

RTT



- For Vibration resistance (30G guaranteed)
- Guaranteed 2000 hours at 125°C ((φ12.5 or more : 5000h)

HVK

HTK

- Low ESR and high ripple current compare with aluminum electrolytic capacitor
- Guaranteed 4000 hours at 125°C

RJK



- For Air-Bag application
- Guaranteed 5000 hours 105°C

Example of Standard ratings

| | |
|---------------|----------------------|
| Rated voltage | 25V to 35V |
| Capacitance | 2500uF to 14000uF |
| Endurance | 105°C 5000hours |
| Case size | φ 16x20L to φ 18x40L |

RKC

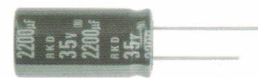


- High temperature guaranteed, low ESR and high ripple current for automotive application
- Guaranteed 2000~3000 hours 135°C

Example of Standard ratings

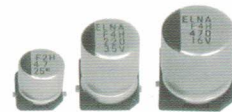
| Rated Voltage (V) | Cap (μF) | Case size | ESR (Ω max./100kHz) | | Rated ripple current (mArms/100kHz) | |
|-------------------|----------|-----------|---------------------|-------|-------------------------------------|-------|
| | | | 20°C | -40°C | 135°C | 125°C |
| 25 | 2000 | φ12.5x20L | 0.040 | 0.48 | 1690 | 2760 |
| | 4700 | φ16x25L | 0.028 | 0.22 | 2870 | 4260 |
| | 10000 | φ18x35.5L | 0.019 | 0.12 | 3750 | 6280 |
| | 12000 | φ18x40L | 0.018 | 0.10 | 4080 | 7070 |
| 35 | 1300 | φ12.5x20L | 0.040 | 0.48 | 1690 | 2760 |
| | 2200 | φ12.5x30L | 0.028 | 0.24 | 2900 | 4490 |
| | 4700 | φ18x31.5L | 0.022 | 0.16 | 3470 | 5600 |
| 50 | 7500 | φ18x40L | 0.018 | 0.10 | 4080 | 7070 |
| | 620 | φ12.5x20L | 0.073 | 0.88 | 1470 | 2400 |
| | 1000 | φ16x20L | 0.050 | 0.55 | 1870 | 2960 |
| | 2200 | φ16x35.5L | 0.029 | 0.27 | 3160 | 5480 |
| 63 | 3600 | φ18x40L | 0.023 | 0.16 | 3700 | 6420 |
| | 390 | φ12.5x20L | 0.072 | 0.56 | 1420 | 1640 |
| | 1000 | φ16x25L | 0.038 | 0.23 | 2680 | 2940 |
| | 2200 | φ18x35.5L | 0.022 | 0.12 | 3690 | 5220 |
| 80 | 2400 | φ18x40L | 0.021 | 0.11 | 3820 | 5660 |
| | 270 | φ12.5x20L | 0.072 | 0.56 | 1420 | 1640 |
| | 470 | φ16x20L | 0.053 | 0.34 | 1910 | 2140 |
| | 1000 | φ16x35.5L | 0.027 | 0.15 | 3420 | 4590 |
| 100 | 1600 | φ18x40L | 0.021 | 0.11 | 3820 | 5660 |
| | 160 | φ12.5x20L | 0.090 | 0.75 | 1580 | 1410 |
| | 220 | φ12.5x25L | 0.068 | 0.55 | 2140 | 1960 |
| | 470 | φ18x31.5L | 0.041 | 0.27 | 3440 | 2720 |
| | 910 | φ18x40L | 0.026 | 0.14 | 5280 | 3560 |

RKD



- Guaranteed 5000 hours at 125°C (φ8 : 2000h, φ10 : 3000h)

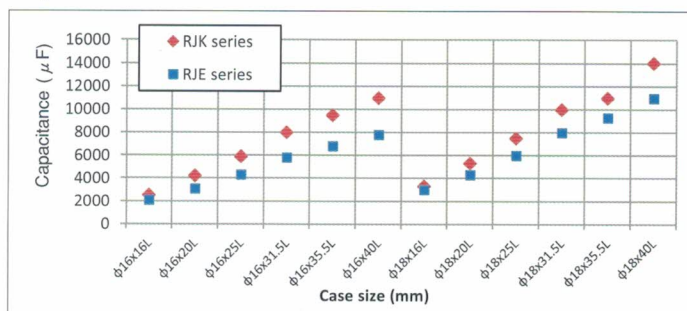
RZF



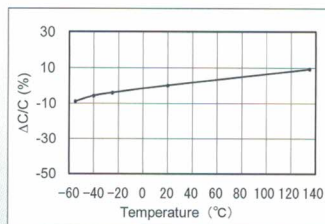
- Low ESR and Long life
- Guaranteed 2000 hours at 125°C (φ8, φ10 : 4000h)



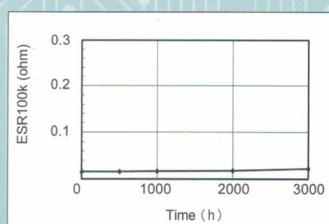
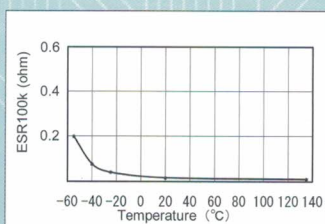
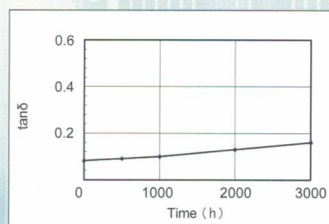
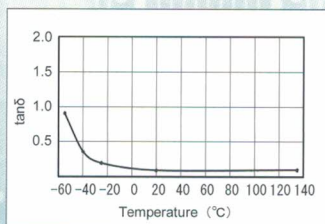
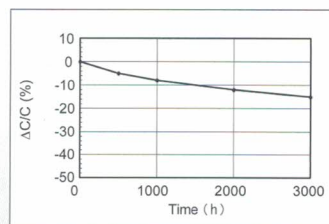
Capacitance vs Case dimension: 25V



Temperature Characteristics RKC 25V4700uF φ16X25L



Endurance (Applied rated ripple current) at 135°C RKC 25V4700uF φ16X25L 2870mArms at 100kHz



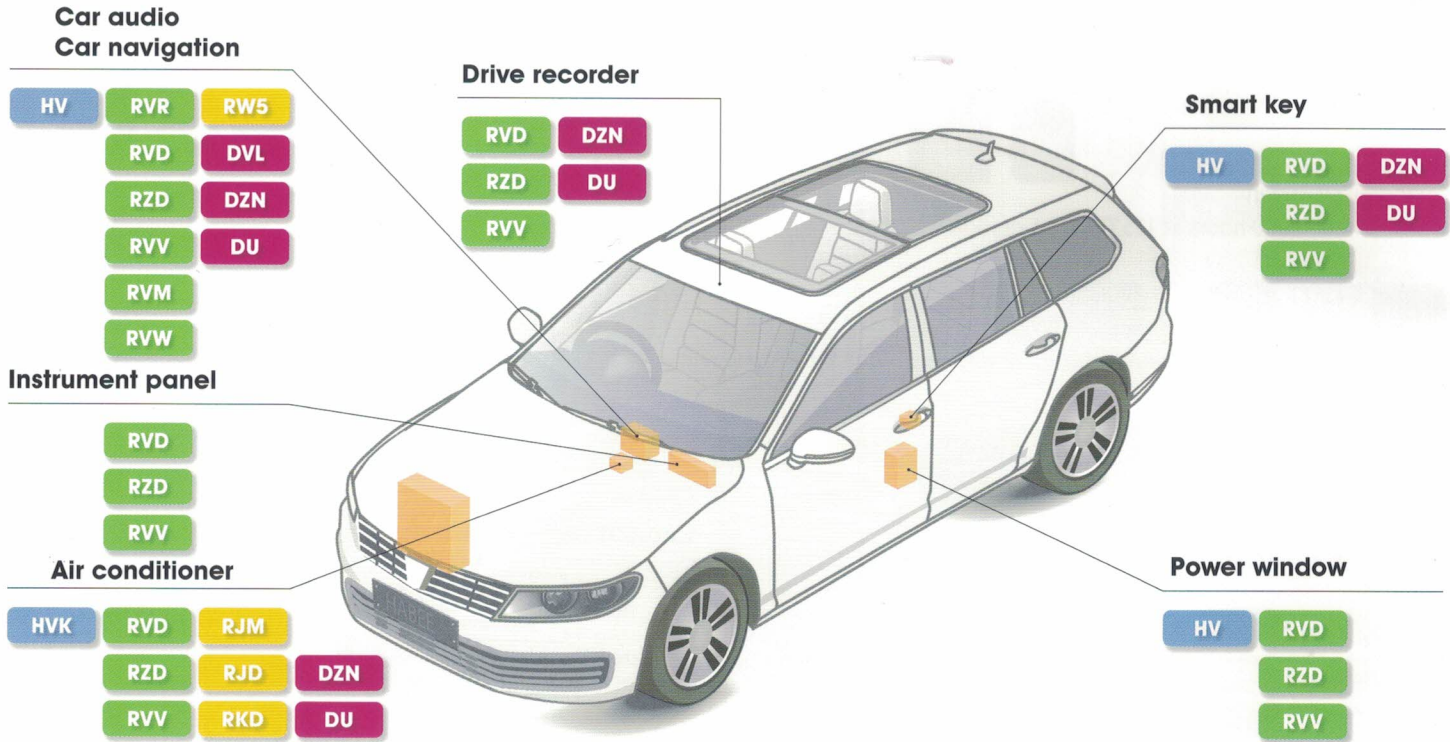
Comfortable equipment

Hybrid

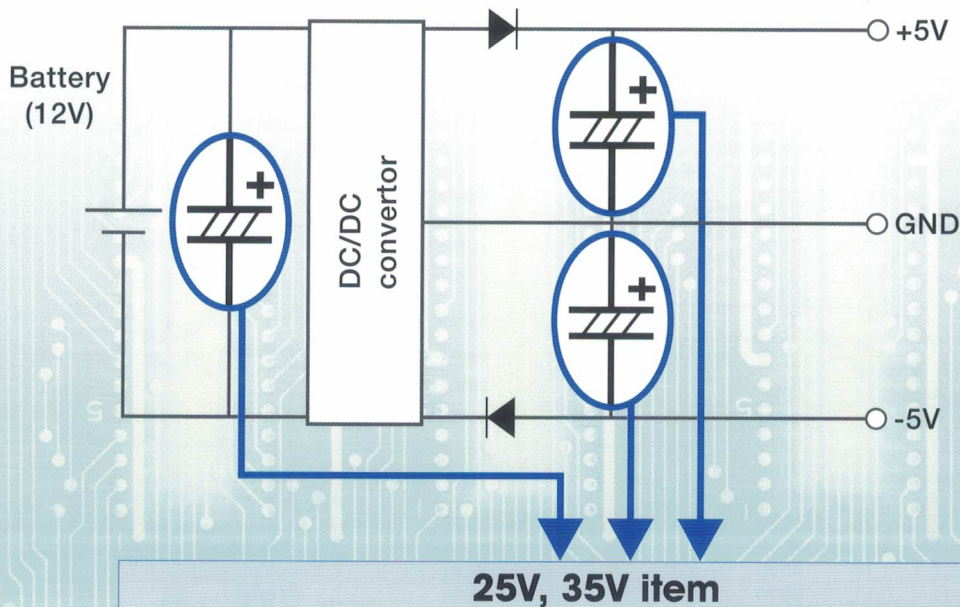
Chip

Radial

EDLC



Recommended Series for DC/DC converter



SMD



RVD series

RVV series

RZD series

RZF series

RVT series

Hybrid



HV series

HVK series

RJM



- High capacitance, low ESR and high ripple current
- Guaranteed 10000 hours 105°C
($\phi 5$: 5000 hours, $\phi 6.3$: 6000 hours, $\phi 8$: 8000 hours)

RW5



- High resolution sound quality grade for car-audio
- Guaranteed 1000 hours at 105°C

RVV



- High CV, low ESR and high ripple
- Guaranteed 2000 hours at 105°C

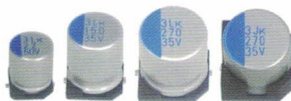
DVL



- SMD, Low Resistance Type
- Guaranteed 1000 hours at 85°C

HVK

HTK



- Low ESR and high ripple current compare with aluminum electrolytic capacitor
- Guaranteed 4000 hours at 125°C

RZD

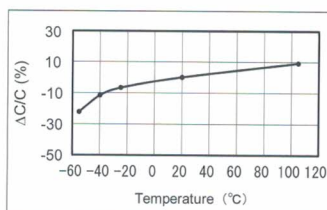


- High CV, low ESR and high ripple
- Guaranteed 2000 hours at 105°C

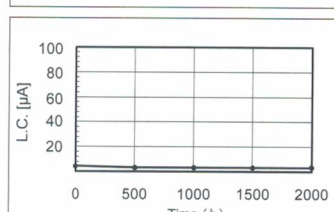
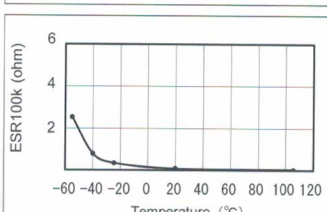
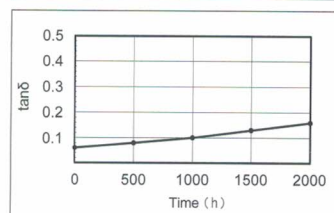
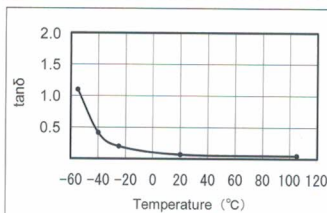
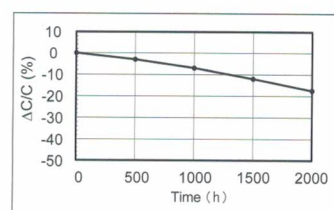
Example of Standard ratings

| Rated Voltage (V) | Cap (μ F) | Case size | ESR | | Rated ripple current | |
|-------------------|----------------|------------------------|-------------------------|-------|----------------------|--------|
| | | | (Ω max./100kHz) | 20° C | (mArms/100kHz) | 125° C |
| 6.3 | 330 | $\phi 6.3 \times 5.8L$ | 0.26 | | 300 | |
| | 680 | $\phi 6.3 \times 7.7L$ | 0.16 | | 600 | |
| | 1500 | $\phi 8 \times 10L$ | 0.08 | | 850 | |
| | 2200 | $\phi 10 \times 10L$ | 0.06 | | 1190 | |
| 10 | 330 | $\phi 6.3 \times 5.8L$ | 0.26 | | 300 | |
| | 470 | $\phi 6.3 \times 7.7L$ | 0.16 | | 600 | |
| | 1000 | $\phi 8 \times 10L$ | 0.08 | | 850 | |
| | 1500 | $\phi 10 \times 10L$ | 0.06 | | 1190 | |
| 16 | 220 | $\phi 6.3 \times 5.8L$ | 0.26 | | 300 | |
| | 330 | $\phi 6.3 \times 7.7L$ | 0.16 | | 600 | |
| | 680 | $\phi 8 \times 10L$ | 0.08 | | 850 | |
| | 1000 | $\phi 10 \times 10L$ | 0.06 | | 1190 | |
| 25 | 150 | $\phi 6.3 \times 5.8L$ | 0.26 | | 300 | |
| | 220 | $\phi 6.3 \times 7.7L$ | 0.16 | | 600 | |
| | 470 | $\phi 8 \times 10L$ | 0.08 | | 850 | |
| | 820 | $\phi 10 \times 10L$ | 0.06 | | 1190 | |
| 35 | 100 | $\phi 6.3 \times 5.8L$ | 0.26 | | 300 | |
| | 150 | $\phi 6.3 \times 7.7L$ | 0.16 | | 600 | |
| | 330 | $\phi 8 \times 10L$ | 0.08 | | 850 | |
| | 560 | $\phi 10 \times 10L$ | 0.06 | | 1190 | |

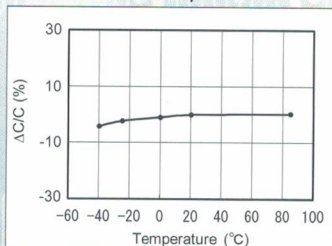
Temperature Characteristics
RZD 25V470 μ F ϕ 8X10L



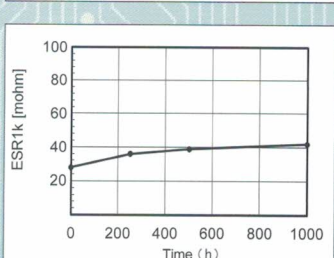
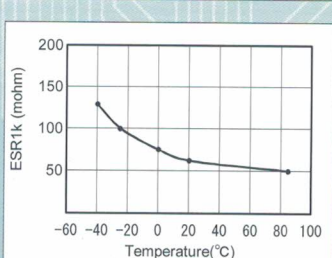
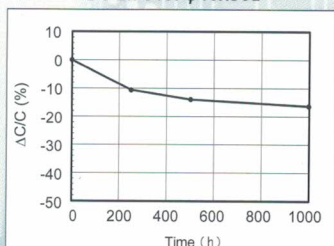
Endurance (Applied rated ripple current) at 105°C
RZD 25V470 μ F ϕ 8X10L 850mArms at 100kHz



Temperature Characteristics
DU 2.7V10F ϕ 10X30L



Endurance (Applied 2.7V) at 65°C
DU 2.7V10F ϕ 10X30L



DU



- High Power, For Low Temperature Type Capacitors
- For Low Temperature (-40°C).
- Guaranteed 1000 hours 65°C

Example of Standard ratings

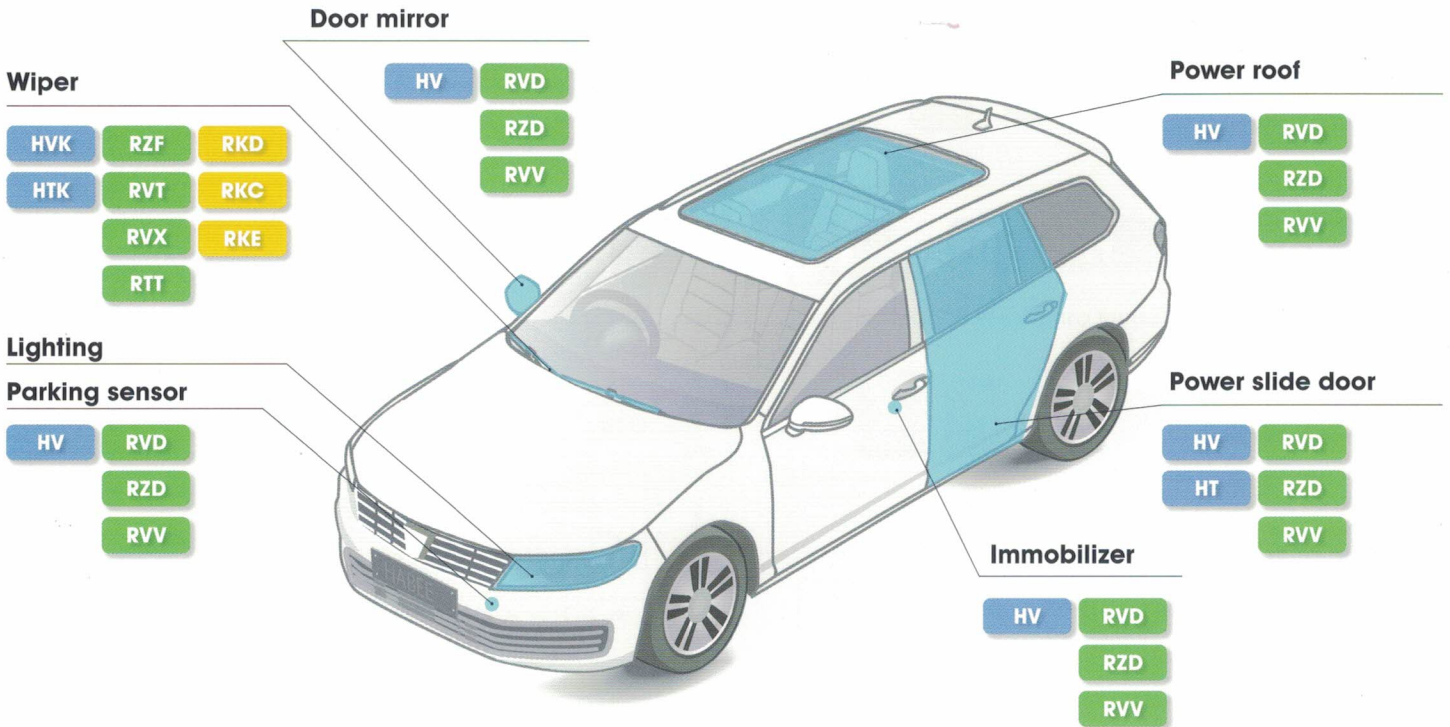
| Max. operating voltage (V) | Cap (μ F) | Case size | Internal resistance (m Ω max./1kHz) | |
|----------------------------|----------------|------------------------|--|-------|
| | | | (at 1kHz) | (DCR) |
| 2.7 | 1 | $\phi 8 \times 12L$ | 250 | 700 |
| | 3.3 | $\phi 8 \times 20L$ | 75 | 200 |
| | 6.8 | $\phi 10 \times 20L$ | 60 | 120 |
| | 10 | $\phi 10 \times 30L$ | 50 | 75 |
| | 15 | $\phi 12.5 \times 25L$ | 35 | 60 |
| | 25 | $\phi 16 \times 25L$ | 25 | 42 |
| | 33 | $\phi 16 \times 31.5L$ | 20 | 35 |

Exterior equipment

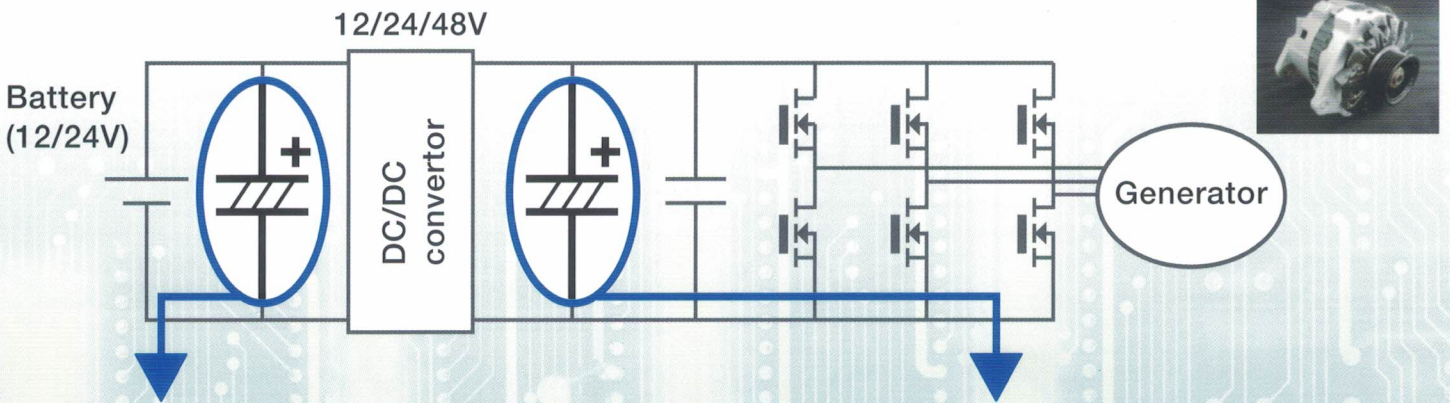
Hybrid

Chip

Radial



Recommended Series for Motor control



25V,35V item

| | | |
|------|--|-------------------|
| THD | | RKD series |
| THD | | RKC series |
| Vib. | | RKE series |
| SMD | | RZF series |
| SMD | | RVT series |
| SMD | | RVX series |

| | | |
|--------|--|-------------------|
| Vib. | | RTT series |
| Hybrid | | HVK series |
| Vib. | | HTK series |

25V~100V item

| | | |
|------|--|-------------------|
| THD | | RKD series |
| THD | | RKC series |
| Vib. | | RKE series |
| SMD | | RZF series |
| SMD | | RVT series |
| SMD | | RVX series |

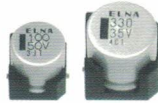
| | | |
|--------|--|-------------------|
| Vib. | | RTT series |
| Hybrid | | HVK series |
| Vib. | | HTK series |

RKD



- Guaranteed 5000 hours at 125°C (φ8: 2000h, φ10: 3000h)

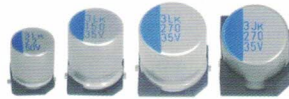
RTT



- For Vibration resistance (30G guaranteed)
- Guaranteed 2000 hours at 125°C (φ12.5 or more: 5000h)

HVK

HTK



- Low ESR and high ripple current compare with aluminum electrolytic capacitor
- Guaranteed 4000 hours at 125°C

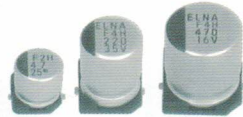
RKE



- Vibration resistance (40G, 10 to 2000Hz, X,Y,Z = per 2 hours)
- Guaranteed 5000 hours 125°C

| | |
|---------------|------------------------|
| Rated voltage | 25V to 50V |
| Capacitance | 1200uF to 8200uF |
| Endurance | 125°C 5000hours |
| Case size | Φ 16x31.5L to Φ 20x40L |

RZF



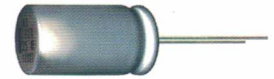
- Low ESR and Long life
- Guaranteed 2000 hours at 125°C (φ8, φ10: 4000h)

Example of Standard ratings

| Rated Voltage (V) | Cap (μF) | Case size | ESR (Ω max./100kHz) | | Rated ripple current (mArms) |
|-------------------|----------|-----------|---------------------|-------|------------------------------|
| | | | 20°C | -40°C | 125°C |
| | | | | | |
| 10 | 100 | φ6.3x5.8L | 1.2 | 22 | 110 |
| | 220 | φ6.3x7.7L | 0.60 | 12 | 220 |
| | 470 | φ8x10L | 0.30 | 5.5 | 296 |
| | 680 | φ10x10L | 0.20 | 3.6 | 440 |
| 16 | 100 | φ6.3x5.8L | 1.2 | 22 | 110 |
| | 220 | φ6.3x7.7L | 0.60 | 12 | 220 |
| | 330 | φ8x10L | 0.30 | 5.5 | 296 |
| | 680 | φ10x10L | 0.20 | 3.6 | 440 |
| 25 | 47 | φ6.3x5.8L | 1.2 | 22 | 110 |
| | 100 | φ6.3x7.7L | 0.60 | 12 | 220 |
| | 220 | φ8x10L | 0.30 | 5.5 | 296 |
| | 330 | φ10x10L | 0.20 | 3.6 | 440 |
| 35 | 47 | φ6.3x5.8L | 1.2 | 22 | 110 |
| | 100 | φ6.3x7.7L | 0.60 | 12 | 220 |
| | 220 | φ8x10L | 0.30 | 5.5 | 296 |
| | 330 | φ10x10L | 0.20 | 3.6 | 440 |

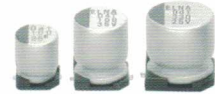
Rated ripple current: 100kHz

RKC



- High temperature guaranteed, low ESR and high ripple current for automotive application
- Guaranteed 2000~3000 hours 135°C

RVT

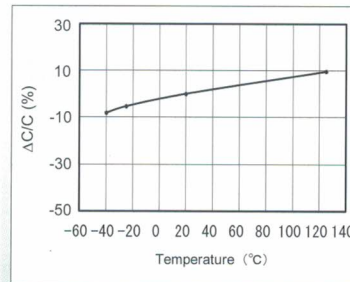


- High temperature and long life
- Guaranteed 2000 hours at 125°C (φ4 to φ8x6.5L: 1000h, φ12.5x13.5L: 5000h)



- Boots type for Horizontal usage

Temperature Characteristics
RZF 35V220uFφ8X10L



Endurance (Applied rated ripple current) at 125°C
RZF 35V220uFφ8X10L 296mArms at 100kHz

