

For Automotive Anti-Vibration Conductive Polymer Hybrid Aluminum Electrolytic Capacitors
Start the mass production of 125°C guaranteed Surface Mount Type (SMD) “HTK” Series
and 105°C guaranteed Surface Mount Type (SMD) “HT” Series

ELNA is expanding and developing new products especially for Automotive and Environmental/Energy market which is expected a further growth.

Following this policy, ELNA has recently developed “conductive polymer hybrid aluminum electrolytic capacitors” which combined advantages of both aluminum electrolytic capacitors and conductive polymer capacitors. This new product incorporated the hybrid electrolyte that blended electrolytic solution (liquid) with conductive polymer (solid) using the unique electrolyte technology we had long been building up.

At this time, HTK series and HT series had been started the mass production in ELNA TOHOKU CO., LTD. Aomori factory.

Features:

1. High anti-vibration; 30G

Adopting the boot type base plate with additional terminals for anti-vibration made it possible to guarantee the vibration acceleration up to 30G.

2. Low ESR, High ripple current

Use of the hybrid electrolyte that blended electrolytic solution with conductive polymer realized low ESR and high ripple current equivalent to those of conductive polymer capacitors.

3. Low leakage current

Use of the hybrid electrolyte that blended electrolytic solution with conductive polymer realized low leakage current equivalent to that of aluminum electrolytic capacitors.

4. High temperature, long life

Use of the technologies to lower evaporation of electrolytic solution by hybrid electrolyte and to reduce thermal deterioration by conductive polymer realized guaranteed 4000 hours at 125deg C and 5000 hours at 105deg C.

The above features 1),2) and 4) will contribute to

Compact, lightweight and reduced numbers of: automotive equipment such as power supplies of automotive engine ECU (Electronic Control Unit) and various motor ECUs; and DC/DC

converters and switching power supplies for the set requiring the reduction of size, weight and number of usage, high reliability and long life and maintenance-free operation for the set
The above feature 3) will contribute to reduction in power consumption and stability in operation for various devices because in automotive power supplies, leakage current of capacitors may increase the dark current in some circuits during an engine stop.

Specifications

Size (D×L)	: 8.0mm×10.0mm , 10.0mm×10.0mm
Endurance	: HTK series 125°C4000 hours HT series 105°C5000 hours
Category temperature range	: HTK series -55~125°C HT series -55~105°C
Rated voltage range	: 25V~80V
Capacitance range	: 22μF~330μF
ESR	: 20 mΩ~45mΩ(100kHz/20°C)
Rated ripple current	: HTK series 1100mA~2000mA(100kHz/125°C) HT series 1600mA~2500mA(100kHz/105°C)
Leakage current	: Less than 0.01CV or 3μA whichever is larger. (Rated voltage applied, after 2 min)

[Data Sheet; HTK Series](#)

[Data Sheet; HT Series](#)

