

AXH Series

Features

- · Low impedance capacitors
- · For automobile modules and other high temperature applications
- Designed for reflow soldering
- · Designed for surface mounting on high-density PCB
- Vibration resistant structure
- RoHS 2.0 compliant, 247 REACH&SVHC compliant
- AEC-Q200 compliant, Please contact Jarson for more details, test data, information

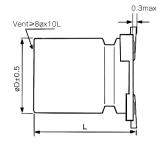


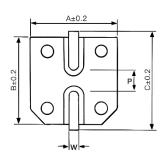
Marking color: Black



| · · · · · · · · · · · · · · · · · · · | · | | · | <u>, </u> | | | | | |
|---------------------------------------|---|----------------------------------|-----|--|-------|------|-----|------------------------------|--|
| Specifications | | | | | | | | | |
| Category temp. range | –40°C to +135°C | | | | | | | | |
| Capacitance tolerance | ±20% (120 Hz / +20 °C) | | | | | | | | |
| Leakage current | $I \le 0.01$ CV or 3 μA whichever is greater (after 2 minutes) | | | | | | | | |
| Tanδ | Please see the attached characteristics list | | | | | | | | |
| Characteristics at low | Rated voltage (V) | 10 | 16 | 25 | 35 | 50 | lmp | Impedance ratio at 120 Hz | |
| temperature | Z(-40°C)/Z(+20°C) | 12 | 8 | 6 | 4 | 4 | • | | |
| | After applying rated working voltage for 2000 hours at +135 °C \pm 2 °C, and then being stabilized at +20 °C, | | | | | | | | |
| | capacitors shall meet the following limits. | | | | | | | | |
| Endurance | Capacitance change Within ±30% of the initial value | | | | | | | | |
| | Dissipation factor (tan δ) Less than 300% of the initial value | | | | | | | | |
| | Leakage current Within the initial limit | | | | | | | | |
| Ch - IC I'C | After storage for 1000 h at +125 $^{\circ}$ C ± 2 $^{\circ}$ C with no voltage applied and then being stabilized at +20 $^{\circ}$ C, | | | | | | | | |
| Shelf life | capacitors shall meet the limits specified in endurance. | | | | | | | | |
| | After reflow soldering and then being stabilized at +20 °C, capacitors shall meet the following limits. | | | | | | | | |
| Resistance to | Capacitance change | Within ±10% of the initial value | | | | | | | |
| soldering heat | Dissipation factor (tan δ) Within the initial limit | | | | | | | | |
| | Leakage current Within the initial limit | | | | | | | | |
| Frequency correction | Frequency | 50Hz | 120 | Hz | 300Hz | 1kH: | z | 10kHz≦ | |
| factor for ripple current | Correction Factor | 0.35 | 0.5 | 5 | 0.64 | 0.83 | 3 | 1.0 | |
| Dimonsions: | | | | | | | | | |

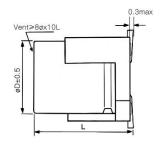
Dimensions:

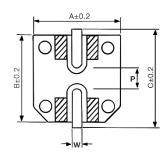




| Dimensions Unit: mm | | | | | | | |
|---------------------|----------|------|------|------|---------|-------|--|
| φD | L | Α | В | С | W | P±0.2 | |
| 8 | 10.5±0.5 | 8.3 | 8.3 | 9.1 | 0.7~1.3 | 3.1 | |
| 10 | 10.5±0.5 | 10.3 | 10.3 | 11.1 | 0.7~1.3 | 4.4 | |
| 12.5 | 13.5±0.5 | 13.0 | 13.0 | 14.0 | 1.1~1.4 | 4.4 | |

Vibration resistant structure:

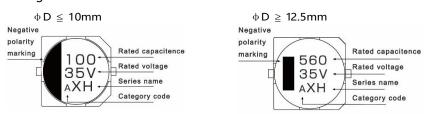








Marking:



Part Number System:

SMD Aluminum E-Caps XH series 16V 220 μF $\pm 20 \%$ 8 ϕ x10.5L

<u>A</u> <u>XH</u> <u>1C</u> <u>221</u> <u>M</u> <u>0810</u>

Product category Series name Rated voltage Capacitance Capacitance tolerance Case Size

| Characteristics list | | | | | | | | | |
|----------------------|----------------|------------|-----------|--------------------------------------|--------------|--------|---------------|-------------------|--|
| Rated Capacitance | | Case size | | Specification | | | | Taping&Reel | |
| voltage (V) | (±20%) (μF) | øD (mm) | L (mm) | Rated ripple current① (mA rms) | lmp.② (Ω) | tan δ③ | Part Number@ | MPQ (pcs/reel) | |
| | 220 | 8 | 10.5 | 270 | 0.20 | 0.30 | AXH1A221M0810 | 500 | |
| 10 | 330 | 8 | 10.5 | 270 | 0.20 | 0.30 | AXH1A331M0810 | 500 | |
| | | 10 | 10.5 | 500 | 0.15 | 0.30 | AXH1A331M1010 | 500 | |
| | 470 | 10 | 10.5 | 500 | 0.15 | 0.30 | AXH1A471M1010 | 500 | |
| 16 | 100 | 8 | 10.5 | 270 | 0.20 | 0.23 | AXH1C101M0810 | 500 | |
| | 220 | 8 | 10.5 | 270 | 0.20 | 0.23 | AXH1C221M0810 | 500 | |
| | 330 | 10 | 10.5 | 500 | 0.15 | 0.23 | AXH1C331M1010 | 500 | |
| | 470 | 10 | 10.5 | 500 | 0.15 | 0.23 | AXH1C471M1010 | 500 | |
| 25 | 100 | 8 | 10.5 | 270 | 0.20 | 0.18 | AXH1E101M0810 | 500 | |
| | 220 | 10 | 10.5 | 500 | 0.15 | 0.18 | AXH1E221M1010 | 500 | |
| | 330 | 10 | 10.5 | 500 | 0.15 | 0.18 | AXH1E331M1010 | 500 | |
| | 820 | 12.5 | 13.5 | 750 | 0.08 | 0.18 | AXH1E821M1313 | 200 | |
| | 1000 | 12.5 | 13.5 | 750 | 0.08 | 0.18 | AXH1E102M1313 | 200 | |
| | 47 | 8 | 10.5 | 270 | 0.20 | 0.16 | AXH1V470M0810 | 500 | |
| 35 | 100 | 8 | 10.5 | 270 | 0.20 | 0.16 | AXH1V101M0810 | 500 | |
| | 220 | 10 | 10.5 | 500 | 0.15 | 0.16 | AXH1V221M1010 | 500 | |
| 33 | 330 | 12.5 | 13.5 | 750 | 0.08 | 0.16 | AXH1V331M1313 | 200 | |
| | 470 | 12.5 | 13.5 | 750 | 0.08 | 0.16 | AXH1V471M1313 | 200 | |
| | 560 | 12.5 | 13.5 | 750 | 0.08 | 0.16 | AXH1V561M1313 | 200 | |
| 50 | 47 | 8 | 10.5 | 270 | 0.30 | 0.16 | AXH1H470M0810 | 500 | |
| | 100 | 10 | 10.5 | 500 | 0.25 | 0.16 | AXH1H101M1010 | 500 | |
| | 220 | 12.5 | 13.5 | 750 | 0.18 | 0.16 | AXH1H221M1313 | 200 | |

① Rated ripple current (100kHz / +135°C) ② Impedance (100kHz / +20°C) ③ $\tan \delta$ (120Hz / +20°C)

⑤ For automotive, the Part Number is appended with "a" at the end.⑤ For Vibration resistant structure, the Part Number is appended with "v" at the end.※Please refer to the page of reflow conditions for reflow profile.