

TYPE MXH, X2, EMI, RFI Suppression Capacitors, Harsh Environment

THB 2,000 Hr @ 85 °C, 85% RH, and Vr, AEC-Q200

The MXH series of X2, across-the-line EMI suppression capacitors are designed for the most challenging environments. The series passes a 2,000-hour THB test, twice the 1,000-hour industry standard for THB testing. The MXH series is AEC-Q200 qualified and possesses international agency approvals for safety and performance for X2, across-the-line applications.

Highlights

- Excels at EMI Suppression in harsh environmental conditions
- THB 2,000 Hr @ 85 °C, 85% RH, and Vr
- Automotive Grade (AEC-Q200) qualified
- High operating temperature: up to 110 °C
- International agency approvals for safety and performance

Specifications

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| Capacitance Range | 0.1 μ F to 15 μ F |
| Capacitance Tolerance | $\pm 10\%$ ($\pm 20\%$ optional) |
| Rated Voltage | 305 Vac, 630 Vdc |
| Operating Temperature Range | -40 °C to +110 °C (+85 °C to 110 °C, voltage derating factor of 1.35% per Deg. C) |
| Life Expectancy | 100,000h at rated voltage and hot spot temperature ≤ 85 °C |
| Dissipation Factor | 0.001 @ 1KHz @ 20 °C |
| IEC Climatic Category | 40/110/56 IEC60068-1 |
| THB Rating | +85°C / 85% RH @ rated voltage for 2,000hrs +24/-0 Capacitance Change Rate: ($\Delta C/C$): $\leq \pm 10\%$ DF Change ($\Delta tg\delta$): $\leq 240 \cdot 10^{-4}$ at 10 KHz ($C \leq 1\mu F$) DF Change ($\Delta tg\delta$): $\leq 150 \cdot 10^{-4}$ at 1 KHz ($C > 1\mu F$) IR: $\geq 50\%$ of initial limit |
| Damp Heat, Steady State (Reference: IEC 60384-14; 2013/AMD1:2016) | +40°C / 93% RH @ rated voltage for 1,344 hrs +24/-0 Capacitance Change Rate: ($\Delta C/C$): $\leq \pm 5\%$ DF Change ($\Delta tg\delta$): $\leq 80 \cdot 10^{-4}$ at 10 KHz ($C \leq 1\mu F$) DF Change ($\Delta tg\delta$): $\leq 50 \cdot 10^{-4}$ at 1 KHz ($C > 1\mu F$) IR: $\geq 50\%$ of initial limit |

Agency Approvals **UL:** UL 60384-14, CSA-E60384-14
VDE: IEC 60384-14:2013, IEC 60384-14:2013/AMD1:2016
CQC: IEC 60384-14:2013/AMD1:2016

<https://www.cde.com/new-product/mxh>



Typical Applications

Class X2 EMI/RFI Across-the-Line Filters for Harsh Environments, Utility Meters, UPS, EV Chargers, Inverters, SMPS, and Portable Power Systems.



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