

# TYPE MXT, X2, EMI/RFI Suppression Capacitors, Harsh Environment

## THB 1,000 Hr @ 85 °C, 85% RH, and Vr

The MXT series is constructed of Metallized Polypropylene Film encapsulated with self-extinguishing resin in plastic box of material meeting the UL 94V-0 requirements. The series is suitable for harsh environment conditions. Applications include "across the line" class X2 and EMI/RFI suppression.

### Highlights

- THB 1,000 Hr @ 85°C, 85% RH, and Vr
- High stability of capacitance
- High operating temperature: 110 °C
- Self-healing property
- Flame-retardant plastic case and resin
- Suitable for harsh environmental conditions

### Specifications

Capacitance Range	0.1 $\mu$ F to 40 $\mu$ 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 $\leq 85$ °C
Dissipation Factor	0.001 @ 1 kHz @ 20 °C
IEC Climatic Category	40/110/56 IEC60068-1
THB Rating	+85°C / 85% RH @ rated voltage for 1,000 hrs +24/-0 Capacitance Change Rate: ( $\Delta C/C$ ): $\leq \pm 10\%$ DF Change ( $\Delta t g \delta$ ): $\leq 240 * 10^{-4}$ at 10 kHz ( $C \leq 1\mu$ F) DF Change ( $\Delta t g \delta$ ): $\leq 150 * 10^{-4}$ 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 ( $\Delta t g \delta$ ): $\leq 80 * 10^{-4}$ at 10 kHz ( $C \leq 1\mu$ F) DF Change ( $\Delta t g \delta$ ): $\leq 50 * 10^{-4}$ 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, GB/T6346.14-2015



### Typical Applications

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

