

Enhanced Safety Surface Mount MLCCs

Our Enhanced Safety Certified Surface Mount MLCC product line is tested to meet international safety standards:

IEC/EN 60384-14:2013 + A1:2016 class Y2/X1 and UL/CAN/CSA60384-14:2014. Range qualified to AEC-Q200.

Knowles Safety Certified capacitors comply with international UL and IEC/EN specifications, with certification by UL, cUL and TUV, and offer the benefits of a lower profile and less board space. They are available in case sizes 1808, 1812, 2211, 2215 and 2220, and all are available with the option of FlexiCap™ termination to reduce the risk of mechanical cracking. All parts have a CTI ≥ 600, allowing us to offer the SYS range with an even smaller platform suitable for use in equipment within the scope of IEC 62368.

Whether it's AEC-Q200 standards, modems, AC-DC power supplies or applications where lightning strike or other voltage transients represent a threat to electronic equipment, our Safety Certified capacitors allow us to meet a variety of demands. Talk to us today to find out how we can meet yours.

SYX/UYX FAMILY – Y2 (250VAC)/X1 (305VAC) 5KV IMPULSE



Applications	<ul style="list-style-type: none"> • High voltage battery systems within electric vehicles • Three-phase systems requiring 305Vac line to line • Industrial and domestic equipment where safety is critical • Plug-in power supplies 		
Benefits	<table border="0"> <tr> <td> <ul style="list-style-type: none"> • Up to 10 nF • Class Y2/X1 safety capacitors, including Humidity Robustness Grade III • Guaranteed 4mm creepage, mandatory for 250Vac Class Y2 and 305Vac Class X1 full certification • Humidity Robustness Grade III as per EN 60384-14 fully certified </td> <td> <ul style="list-style-type: none"> • 5kV impulse • 1kVDC qualified • Components are 100% DWV tested to 4kV • AQL tested to 4kVDC and 3000Vac 60s — ideal for high voltage battery systems • Unmarked (UYX) components available with additional 2500VDC rating • Case sizes: 1808, 1812, 2211, 2215 and 2220 </td> </tr> </table>	<ul style="list-style-type: none"> • Up to 10 nF • Class Y2/X1 safety capacitors, including Humidity Robustness Grade III • Guaranteed 4mm creepage, mandatory for 250Vac Class Y2 and 305Vac Class X1 full certification • Humidity Robustness Grade III as per EN 60384-14 fully certified 	<ul style="list-style-type: none"> • 5kV impulse • 1kVDC qualified • Components are 100% DWV tested to 4kV • AQL tested to 4kVDC and 3000Vac 60s — ideal for high voltage battery systems • Unmarked (UYX) components available with additional 2500VDC rating • Case sizes: 1808, 1812, 2211, 2215 and 2220
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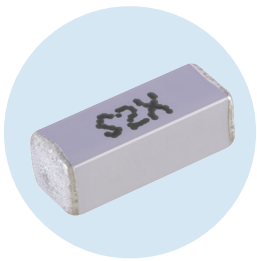
Applications	<ul style="list-style-type: none"> • Applications within the scope of IEC 62368. Ref: EN 60384-14, clause 4.8.1.3 • Ideal for use within ICT and AV equipment
Benefits	<ul style="list-style-type: none"> • Up to 3.9nF • SYS family offers class X1/Y2 safety capacitors, including Humidity Robustness Grade III • 1kVDC certified • Unmarked components can be offered with an additional 2500VDC rating with suffix UYS • Components are 100% DWV tested at 3000VDC • CTI \geq 600 • AQL tested to 3225VDC and 2110Vac 60s • Reduced size compared to SYX • Case sizes: 1808 and 1812

S3X FAMILY – X2 (305VAC) 2500V IMPULSE



Applications	<ul style="list-style-type: none"> • Industrial Switchgear and control systems • 3-phase systems requiring higher voltage ratings • Domestic circuit breakers
Benefits	<ul style="list-style-type: none"> • Up to 56nF • S3X family offers class 305Vac X2 safety capacitors • 2.5kV impulse and a 1kVDC rating • Unmarked components can be offered with an additional 1500VDC rating with suffix U3X • 1kVDC qualified • Components are 100% DWV tested at 3000VDC • CTI \geq 600 • AQL tested to 3225VDC and 1500Vac 60s • Case size: 2220

S2X FAMILY – X2 (250VAC) 2500V IMPULSE



Applications	<ul style="list-style-type: none"> • Industrial Switchgear and control systems • Domestic circuit breakers
Benefits	<ul style="list-style-type: none"> • Up to 10nF • S2X family offers class 250Vac X2 safety capacitors, including Humidity Robustness Grade III • 2.5kV impulse and a 1kVDC rating • 1kVDC qualified • Components are 100% DWV tested at 3000VDC • CTI \geq 600 • AQL tested to 3225VDC and 1500Vac 60s • Case size: 1808