



RFI CAPACITOR SOLUTIONS FILM AND CERAMIC

IN A NUTSHELL

CLASS X

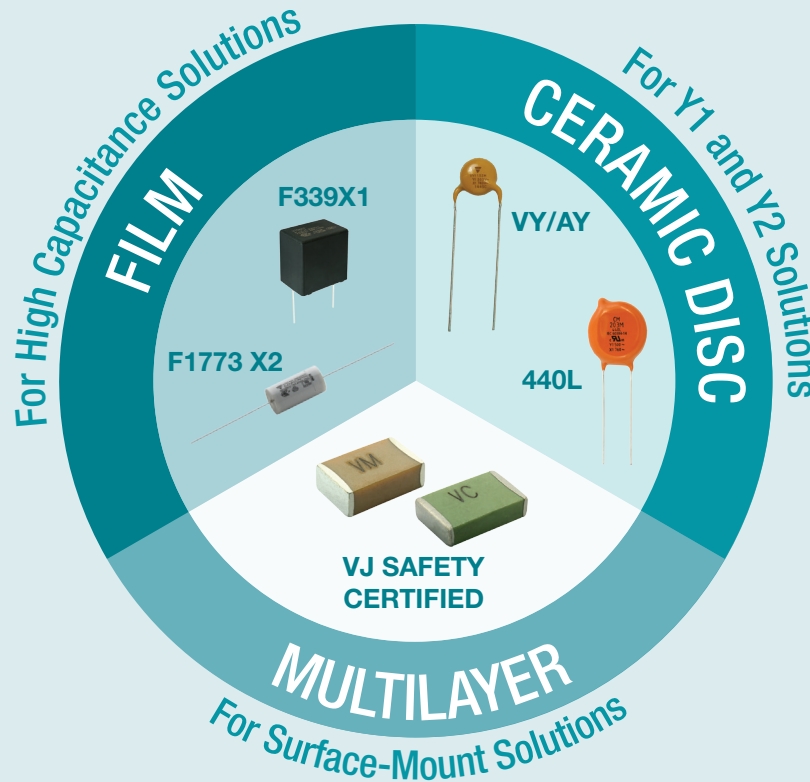
Differential Mode Filtering
Across the Line

Sub Class	Peak Impulse Voltage	Typical Application
X1	4.0 kV	High Pulse
X2	2.5 kV	General Purpose

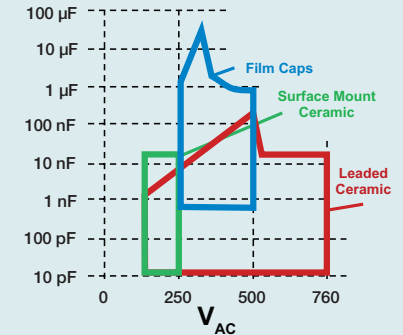
CLASS Y

Common Mode Filtering
Line to Ground

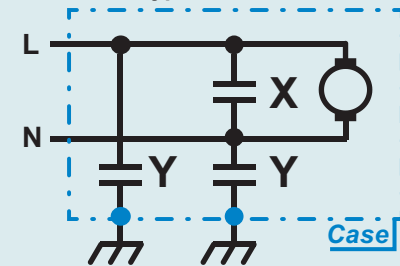
Sub Class	Peak Impulse Voltage	Typical Application
Y1	8.0 kV	High Pulse
Y2	5.0 kV	General Purpose



Safety Capacitor Map



Typical Circuit



Technology	Rating	Series	Capacitance	Certificates	Special Features
Ceramic Disc	X1 / Y1	VY1, VY1C, WKP, 440L	10 pF to 20 nF	IEC, UL, CSA, and CQC	Industry-first 20 nF, 85 °C / 85 % RH 1000 h available
	X1 / Y2	VY2, AY2, WYO	10 pF to 12 nF	IEC, UL, CSA, and CQC	AEC-Q200 available
MLCC	X1 / Y2	VJ Safety Certified C0G (NP0)	10 pF to 1000 pF	IEC, cCSA	1 nF in X1/Y2 with C0G (NP0) Meets IEC 60384-14 min. 4 mm creepage
	X2		10 pF to 470 pF	IEC, cCSA	Meets IEC 60384-14 min. 4 mm creepage
	X1 / Y2	VJ Safety Certified X7R	100 pF to 4700 pF	IEC, cCSA	Meets IEC 60384-14 min. 4 mm creepage
	X2		100 pF to 12000 pF	IEC, cCSA	Meets IEC 60384-14 min. 4 mm creepage
Film	X1	F339X1 480 V _{AC} , 330 V _{AC}	0.001 μF to 2.2 μF	IEC, UL, CSA, and CQC	THB grade available
	X2	F1772(S), F339M, MKP339, F1773	0.001 μF to 40 μF	IEC, UL, CSA, and CQC	AEC-Q200 available, THB grade; axials on demand
	Y2	MKP3386Y2	0.001 μF to 0.47 μF	IEC, UL, and CSA	AEC-Q200 available

For a Full Overview of
RFI Capacitors, Please Visit
www.vishay.com/doc?48140