

EMI Suppression Capacitors

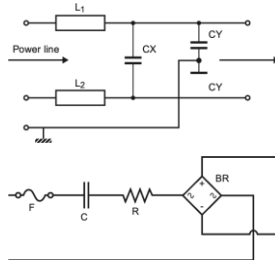
Overview

Metallized Polypropylene Film and Paper

X/Y Suppression capacitors are used in mains-connected applications to minimize the amount of conducted common mode and differential mode electromagnetic interference present in many electrical devices. All products are UL/ENEC/CQC Certified.

Typical Application

- Across the Main (EMI Noise Filtering)
 - Line-to-line (X rated) for differential mode (DM) noise
 - Line-to-ground (Y rated) for common mode (CM) noise
- In Series with the main
 - Capacitive Power Supplies
 - Power Line Communication (PLC)



Class & Series	Dielectric Type ⁽¹⁾	VAC	Max C (μF)	Max. Temp. (°C)	AEC-Q200	Harsh ⁽³⁾ Environment	Can be used in Series w/ Main	Halogen Free
X2	R46	MKP	310	10	110			
	R46H	MKP	310	1	125			
	R52	MKP	310	22	110	•	• (IIB)	•
	F862-V054	MKP	310	4.7	110	•	• (IIB)	•
X1	R47 V057	MKP	440	2.2	110	•	• (IB)	•
	PHE844	MKP	480	2.2	105		• (IA)	
	PHE845	MKP	760	1	105		• (IA)	
	P278	MP	480	0.15	110		•	
Y2	R41 ⁽²⁾	MKP	300	1	110	•		
	R41T ⁽²⁾	MKP	125	1	125	•	• (IIB)	•
	SMP253	MP	250	0.047	100		•	
	PME271Y	MP	250	0.15	115			•
Y1	P295	MP	500	0.0047	115	•	•	
	PME295	MP	440/480	0.0047	115		•	

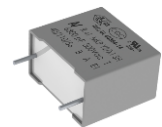
THB Test		Class I	Class II	Class III
Test	A	40 °C / 93 % RH / 21 days	40 °C / 93 % RH / 56 days	60 °C / 93 % RH / 56 days
Condition	B	85 °C / 85 % RH / 168 hours	85 °C / 85 % RH / 500 hours	85 °C / 85 % RH / 1,000 hours

⁽¹⁾ MKP: Metallized PP; MP: Metallized Paper ⁽²⁾ Can be used as an X1

⁽³⁾ According to Humidity Robustness (IEC-60384-14): Three Grades (I, II, III), two test condition options (A, B).



R52



R41T

Key Product Highlights

- X2 Harsh Environment, Grade IIB
 - R52 Miniaturized, Highest C values from the market
 - F862-V054 Higher Ripple Current & rated DC voltage
- Y2 Harsh Environment, Grade IIIB
 - R41T High Temperature, AEC-Q200, SMP253 Impregnated Paper, SMD, High Reliability-stability, and dV/dt.