



FEATURES

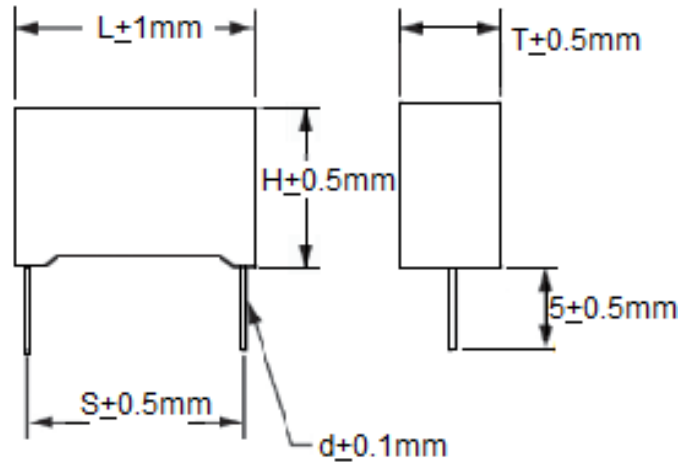
85/85 THB - Safety Agency Approved -
Metallized Polypropylene

APPLICATIONS

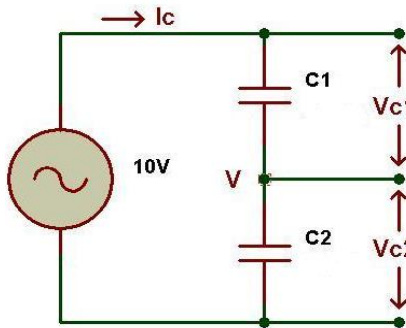
EMI Filters - Across the Line - Outdoor
Applications

Operating Temperature Range	-40°C to +110°C		
Capacitance Tolerance	±10% or ±20% at 1 kHz, 25°C		
AC voltage (50/60 Hz)	UL/CSA	ENEC	CQC
	275/305	275/305	305
Dissipation Factor at 1 kHz and 25°C	Tan δ		
	0.01uF ≤ Cn ≤ 1.0 uF		≤ 0.1%
	1.0uF < Cn ≤ 10.0 uF		≤ 0.3%
	Cn > 10.0 uF		≤ 0.4%
Insulation Resistance @25°C (<70% RH) for 1 minute at 100VDC applied	Capacitance	Terminal to Terminal	Terminal to Case
	≤ 0.33uF	15,000 MΩ	>30000 MΩ at 100VDC >5000 MΩ at 500VDC
	> 0.33uF	5,000 MΩx uF	>30000 MΩ at 100VDC >5000 MΩ at 500VDC
Self-Inductance	≤ 1 nano-Henry per mm of lead spacing and lead length		
Dielectric Strength	Terminal to Terminal	1312 VDC applied for 60 seconds or 2000 VDC applied for 2 seconds Cut-off current: 2A ac or 10mAdc Current limiting resistance: 1Ω/V	
	Terminal to case	2050VDC (50/60 Hz) applied between the terminals and case for 60 Seconds and 25°C	
Life Expectancy	100,000 hours at Un @Hot-Spot temperature T=85°C		
	Capacitance change	≤ 10% of initially measured value	
	Dissipation Factor	≤ 1.0% at 1kHz	
	Insulation Resistance	≥ 100% of initially specified value (T-T) ≥ 3000 MΩ (Terminal to case)	
Humidity test	Temperature: 85°C + 2°C; Humidity: 85% + 2% Loading Voltage: 240Vac (50Hz/60Hz) Duration: 1000 hours		
	Capacitance change	≤ 10% of initially measured value	
	Dissipation Factor	≤ 1.0% at 1kHz	
	Insulation Resistance	≥ 50% of initially specified value (T-T) ≥ 15000 MΩ (Terminal to case)	
Impulse voltage (24 pulses)	C ≤ 1uF Vp=2.5kVDC C > 1uF Vp=2.5kV √C		
Capacitance temperature coefficient	-200ppm/°C, ±100ppm/°C		
Construction	Metallized Polypropylene film		
Electrodes	Vacuum deposited Metal layers		
Coating	Flame retardant Solvent resistant plastic case with epoxy end fill (UL94V-0)		
Lead terminations	Tinned copper clad steel leads		

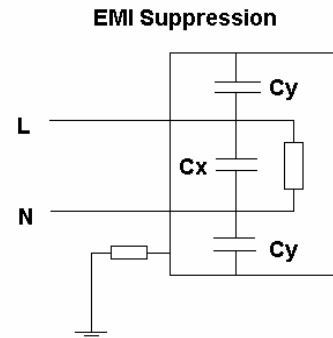
Boxed Metallized Polypropylene Film Capacitors CLASS X2 - 85/85 - THB



All dimensions in (mm)
*17mm lead length available upon request



Capacitive Divider 85/85 X2 circuit



Standard 85/85 X2 circuit

Safety agency	Standard	Voltage	Class	Certificate number
UL/CSA	UL 1414(.0047 to 1uF)	310	FOWX2*/FOWX8*	
	UL 1414(.0022 to 5.6uF)	250/275/310	FOWX2*/FOWX8	
	UL 1283 (.0047 to 10uF)	310	FOKY2^	
ENEC (VDE)	IEC 60384-14/ SE/0252-3	305	X2	
	IEC 60384-14 (ed 3) (.0047 to 46uF)	275/305		
CQC	GB/T14472-1998	275	X2	
	GB/T14472-1998 (.0047 to 46uF)	305		

*Antenna coupling, Line bypass, across the line
^Electromagnetic interference filter

MPX

Class X2 85/85 THB

Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
0.01	MPX103K305D	500	13x11x5	10	0.6
0.022	MPX223K305D	500	13x11x5	10	0.6
0.033	MPX333K305D	500	13x11x5	10	0.6
0.047	MPX473K305D	500	13x12x6	10	0.6
0.047	MPX473K305E	400	18x12x6	15	0.6
0.068	MPX683K305D	500	13x12x6	10	0.6
0.068	MPX683K305E	400	18x12x6	15	0.6
0.082	MPX823K305D	500	13x12x6	10	0.6
0.082	MPX823K305E	400	18x12x6	15	0.6
0.1	MPX104K305D	500	13x12x6	10	0.6
0.1	MPX104K305E	400	18x12x6	15	0.6
0.15	MPX154K305D	500	13x14x8	10	0.6
0.15	MPX154K305E	400	18x12x6	15	0.6
0.22	MPX224K305E	400	18x14x8	15	0.8
0.22	MPX224K305G	200	26x16.5x7	22.5	0.8
0.27	MPX274K305E	400	18x14.5x8.5	15	0.8
0.27	MPX274K305G	200	26x16.5x7	22.5	0.8
0.33	MPX334K305E	400	18x16x10	15	0.8
0.33	MPX334K305G	200	26x17x8.5	22.5	0.8
0.47	MPX474K305E	400	18x19x11	15	0.8
0.47	MPX474K305G	200	26x19x10	22.5	0.8
0.56	MPX564K305E	400	18x18x11	15	0.8
0.56	MPX564K305G	200	26x19x10	22.5	0.8
0.68	MPX684K305E	400	18x22x12.5	15	0.8
0.68	MPX684K305G	200	26x20x11	22.5	0.8
0.82	MPX824K305E	400	18x22x12.5	15	0.8
0.82	MPX824K305G	200	26x20x11	22.5	0.8

Capacitance (µF)	IC PART NUMBER	dv/dt (v/µ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
1	MPX105K305G	200	26x22x12	22.5	0.8
1	MPX105K305H	150	32x20x11	27.5	0.8
1.2	MPX125K305G	200	26x23x13	22.5	0.8
1.2	MPX125K305H	150	32x22x13	27.5	0.8
1.5	MPX155K305G	200	26x24x14	22.5	0.8
1.5	MPX155K305H	150	32x24.5x13	27.5	0.8
2.2	MPX225K305H	150	32x28x14	27.5	0.8
3.3	MPX335K305H	150	32x33x18	27.5	0.8
4.7	MPX475K305H	150	32x37x22	27.5	0.8
4.7	MPX475K305N	100	42.5x32x19	37.5	1
6.8	MPX685K305N	100	42.5x44x24	37.5	1
10	MPX106K305N	100	42.5x45x30	37.5	1
12	MPX126K305N	100	42.5x45x30	37.5	1
12	MPX126K305R	100	57.5x45x30	52.5	1.2
15	MPX156K305N	100	42.5x45x30	37.5	1
15	MPX156K305R	100	57.5x45x30	52.5	1.2
18	MPX186K305R	100	57.5x45x30	52.5	1.2
20	MPX206K305R	100	57.5x45x30	52.5	1.2
22	MPX226K305R	100	57.5x45x30	52.5	1.2
25	MPX256K305R	100	57.5x45x30	52.5	1.2
30	MPX306K305R	100	57.5x45x30	52.5	1.2
33	MPX336K305R	100	57.5x50x35	52.5	1.2
39	MPX396K305R	100	57.5x50x35	52.5	1.2
40	MPX406K305R	100	57.5x50x35	52.5	1.2
45	MPX456K305R	100	57.5x53x50	52.5	1.2
45	MPX456K305RB	100	57.5x60x45	52.5	1.2

MPXB

Capacitive Divider 85/85 THB X2

Capacitance (μF)	IC PART NUMBER	dv/dt (v/μ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
0.1	MPXB104K305E	400	18x13.5x7.5	15	0.8
0.15	MPXB154K305E	400	18x14.5x8.5	15	0.8
0.22	MPXB224K305E	400	18x16x10	15	0.8
0.33	MPXB334K305E	400	18x19x11	15	0.8
0.47	MPXB474K305G	200	26x20x11	22.5	0.8
0.56	MPXB564K305G	200	26x20x11	22.5	0.8
0.68	MPXB684K305G	200	26x22x12	22.5	0.8
0.82	MPXB824K305G	200	26x22x12	22.5	0.8

Capacitance (μF)	IC PART NUMBER	dv/dt (v/μ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
1	MPXB105K305G	200	26x23x13	22.5	0.8
1	MPXB105K305H	100	32x22x13	27.5	0.8
1.2	MPXB125K305H	100	32x28x14	27.5	0.8
1.5	MPXB155K305H	100	32x28x14	27.5	0.8
1.8	MPXB185K305H	100	32x33x18	27.5	0.8
2	MPXB205K305H	100	32x33x18	27.5	0.8
2.2	MPXB225K305H	100	32x33x18	27.5	0.8