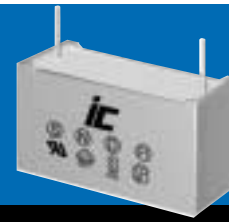


MKP

Class X2 Radial Lead Metallized Polypropylene Capacitors



- EMI filter
- Antenna coupling
- Across the line
- Line bypass

Operating Temperature Range		-40°C to 100°C (IEC 60384-14) -40°C to +85°C (UL, CSA)				
Capacitance Tolerance		±10% at 1kHz, 25°C				
Voltage Range 50-60Hz	VAC	250 (UL, CSA)				
		275 (IEC 60384-14)				
Dissipation Factor		0.1% at 1 kHz, 25°C 0.3% at 10 kHz, 25°C				
Insulation Resistance		Capacitance	Terminal to Terminal Insulation Resistance		Terminal to Case	
		≤0.33 μF	30,000MΩ		≥30,000 MΩ at 100VDC	
		>0.33 μF	10,000 MΩ x μF		≥500MΩ at 500VDC	
Load Life		2,000 hours, +85°C with 125% rated DC voltage				
		Capacitance Change	≤5% maximum			
		Dissipation Factor Change	<200% maximum specification			
		Insulation Resistance	≥50% of minimum initial limits			
Humidity Test		250 hours, 95% RH, 25°C and no applied voltage				
		Capacitance Change	<5% of initial readings @ +25°C, 1kHz			
		Dissipation Factor Change	≤ 200% of maximum specification			
		Insulation Resistance	≥ 50% of minimum initial limit			
Self-inductance		≤1 nH/mm along the capacitor pitch and lead length				
Dielectric Strength		Capacitance	VDC	VAC	Cut Off current: 2A(AC), 10mA(DC) Current limiting resistance = 1Ω/volt 2050VAC for 1 minute between lead and case	
		C≤.0068μF	2121	1500		
		C≥.0068μF	1768	1000		
Capacitance Drift Factor		≤1.0% up to 40°C(after 2 years)				
Capacitance Temperature Coefficient		-200 ppm/°C, ± 100ppm/°C				
Type		Extended metallized film				
Dielectric		Polypropylene film				
Electrodes		Vacuum deposited aluminum layers				
Leads		Tinned copper wire				
Coating		Solvent resistant box with flame retardant epoxy sealed resin (UL 94V-O)				



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MKP

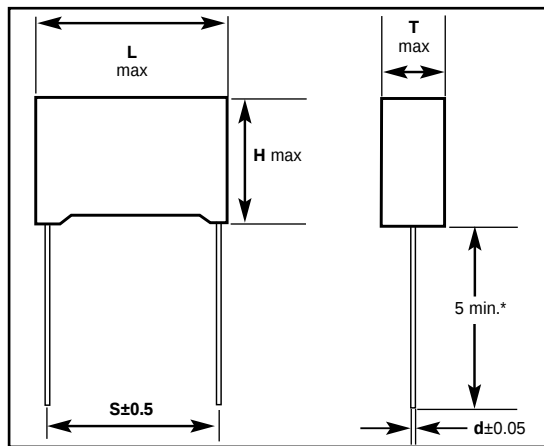
Class X2 Radial Lead
Metallized
Polypropylene
Capacitors

STANDARD PART LISTING

Capacitance (μ F)	IC [®] PART NUMBER	dv/dt	L Max.	H Max.	T Max.	S	d
0.0047	472MKP275K	400	13	11	5	10	0.6
0.0068	682MKP275K	400	13	11	5	10	0.6
0.01	103MKP275K	400	13	11	5	10	0.6
0.015	153MKP275K	400	13	11	5	10	0.6
0.022	223MKP275K	400	13	11	5	10	0.6
0.033	333MKP275K	400	13	12	6	10	0.6
0.047	473MKP275K	300	18	11	5	15	0.8
0.068	683MKP275K	300	18	12	6	15	0.8
0.1	104MKP275K	300	18	12	6	15	0.8
0.15	154MKP275K	180	26.5	16.5	7	22.5	0.8

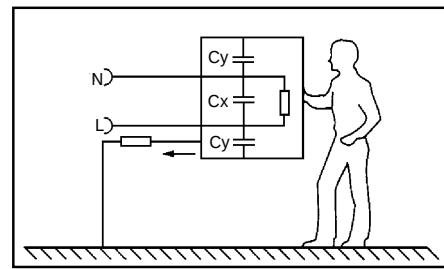
Convert to inches, divide by 25.4

Capacitance (μ F)	IC [®] PART NUMBER	dv/dt	L Max.	H Max.	T Max.	S	d
0.15	154MKP275KB	300	18	14.5	8.5	15	0.8
0.22	224MKP275K	180	26.5	16.5	7	22.5	0.8
0.22	224MKP275KB	300	18	16.5	10	15	0.8
0.33	334MKP275K	180	26.5	19	10	22.5	0.8
0.47	474MKP275KB	180	26.5	19	10	22.5	0.8
0.47	474MKP275K	120	32	20	11	27.5	0.8
0.68	684MKP275K	120	32	22.5	13	27.5	0.8
1.0	105MKP275K	120	32	25	14	27.5	0.8
1.5	155MKP275K	120	32	26	18	27.5	0.8
2.2	225MKP275K	120	32	31	22	27.5	0.8



All dimensions in (mm)

***15mm lead length available upon request**



X2 capacitors are used to suppress electrical noise by reducing the input impedance of the device incorporating the capacitor.

X2 capacitors are connected across the supply line where failure of the capacitor will not result in personal exposure to electrical shock.

X2 capacitors are to be used in applications where the peak voltage is $\leq 1200V$.

Safety Agency	Standard	File #	Rated Voltage	Class
UL	1414	E-149075	250 VAC	FOW X2
CSA	C22.2, No.1-98, 8-M1986	158927, LR85363	250 VAC	X
CB	IEC-60384-14	DE-1-11829	275 VAC	X2
ENEC	EN-1324000 IEC-60384-14	139131L	275 VAC	X2



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MKT

Class X2 Radial Lead Metallized Polyester Capacitors



- EMI filter
- Antenna Coupling
- Across the line
- Line Bypass

Operating Temperature Range		-40°C to 85°C (UL, CSA) -40°C to 100°C (IEC 60384-14)	
Capacitance Tolerance		±10% at 1kHz, 25°C	
Voltage Range 50-60Hz	VAC	250 (UL, CSA)	
		275 (IEC 60384-14)	
Dissipation Factor		1.0% at 1 kHz, 25°C	
Insulation Resistance	Capacitance	Insulation Resistance	Terminal to case
	≤0.33 μF	15,000MΩ	≥30,000MΩ at 1000VDC
	>0.33 μF	5,000 MΩ x μF	≥500MΩ at 500VDC
Load Life	2,000 hours, +85°C with 125% rated DC voltage		
	Capacitance Change	≤5% maximum	
	Dissipation Factor Change	<200% maximum specification	
	Insulation Resistance	≥50% of minimum initial limits	
Humidity Test	250 hours, 95% RH, 25°C and no applied voltage		
	Capacitance Change	<5% of initial readings @ +25°C, 1kHz	
	Dissipation Factor Change	≤ 200% of maximum specification	
	Insulation Resistance	≥ 50% of minimum initial limit	
Self-inductance		≤1 nH/mm along the capacitor pitch and lead length	
Dielectric Strength		1183VDC for 1 minute between leads 1000VAC/2200VDC for 1 second between leads Cut Off current: 2A(AC), 10mA(DC) Current limiting resistance = 1Ω/volt 2050VAC for 1 minute between lead and case	
Capacitance Drift Factor		≤1.0% up to 40°C(after 2 years)	
Capacitance Temperature Coefficient		+400 ppm/°C, ± 200ppm/°C	
Type		Extended metallized film	
Dielectric		Polyester	
Electrodes		Vacuum deposited aluminum layers	
Leads		Tinned copper wire	
Coating		Solvent resistant box with flame retardant epoxy sealed resin (UL 94V-O)	

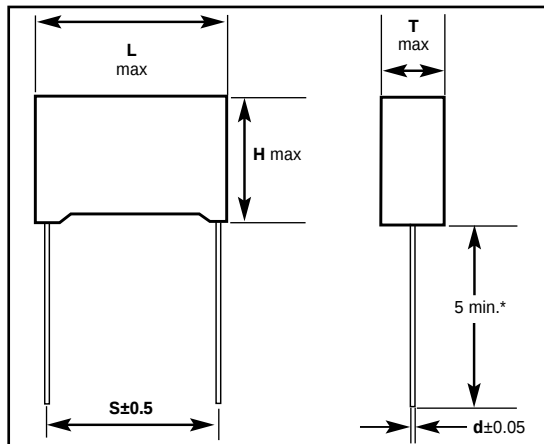


STANDARD PART LISTING

Capacitance (μ F)	WVDC	IC PART NUMBER	dv/dt	Dimensions LxHxT (mm)	S (mm)	D (mm)
0.01	275	103MKT275K	500	10x9x4	7.5	0.6
0.012	275	123MKT275K	500	10x9x4	7.5	0.6
0.015	275	153MKT275K	500	10x9x4	7.5	0.6
0.018	275	183MKT275K	500	10x9x4	7.5	0.6
0.022	275	223MKT275K	500	10x11x5	7.5	0.6
0.027	275	273MKT275K	500	10x11x5	7.5	0.6
0.033	275	333MKT275K	500	10x11x5	7.5	0.6
0.039	275	393MKT275K	400	13x11x5	10	0.6
0.047	275	473MKT275K	400	13x12x6	10	0.6
0.056	275	563MKT275K	400	13x12x6	10	0.6
0.068	275	683MKT275K	400	13x13x7	10	0.6
0.082	275	823MKT275K	400	13x13x7	10	0.6
0.1	275	104MKT275K	400	13x14x8	10	0.6

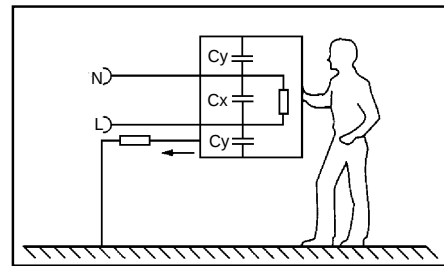
Convert to inches, divide by 25.4

Capacitance (μ F)	WVDC	IC PART NUMBER	dv/dt	Dimensions LxHxT (mm)	S (mm)	D (mm)
0.1	275	104MKT275KB	200	18x12x6	15	0.8
0.12	275	124MKT275K	200	18x12x6	15	0.8
0.15	275	154MKT275K	200	18x13.5x7.5	15	0.8
0.18	275	184MKT275K	200	18x13.5x7.5	15	0.8
0.22	275	224MKT275K	200	18x15x8.5	15	0.8
0.27	275	274MKT275K	200	18x16.5x10	15	0.8
0.33	275	334MKT275K	200	18x16.5x10	15	0.8
0.39	275	394MKT275K	120	26x16.5x7	22.5	0.8
0.47	275	474MKT275K	120	26x17x8.5	22.5	0.8
0.56	275	564MKT275K	120	26x19x10	22.5	0.8
0.68	275	684MKT275K	120	26x19x10	22.5	0.8
0.82	275	824MKT275K	120	26x20x11.5	22.5	0.8
1	275	105MKT275K	120	26x22x12.5	22.5	0.8



All dimensions in (mm)

*:15mm lead length available upon request



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ENEC	EN-1324000 IEC-60384-14	139131L	275 VAC	X2