



## Axial Leaded Polypropylene Film

with Aluminum Foil Electrodes

### FEATURES

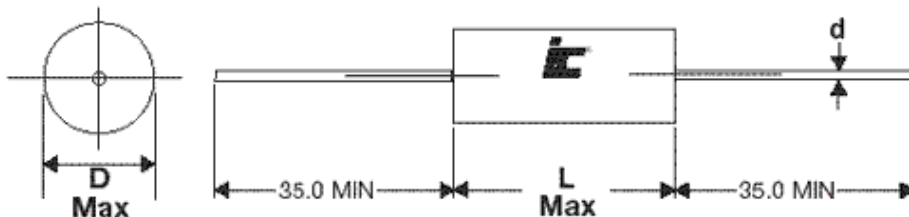
Small Size - Good dvdt - Medium Current

### APPLICATIONS

General Purpose AC/DC - AC/DC Motor Controls - Switching Power Supplies

<b>Operating Temperature Range</b>		<b>-40°C to +85°C</b>									
<b>Capacitance Tolerance</b>		$\pm 10\%$ at 1 kHz, 25°C $\pm 5\%$ optional									
<b>Peak, AC voltage (50/60 Hz)</b>	<b>WVDC</b>	<b>370</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>					
	<b>SVDC</b>	470	625	750	875	1050					
	<b>VAC</b>	160	275/320	320/400	400/440	400/500					
<b>Dissipation Factor (MAX) Tan <math>\delta</math> at 1 kHz and 25°C</b>		<b>C<math>\leq</math>2.5uF</b>		<b>2.5&lt;C<math>\leq</math>20uF</b>			<b>C&gt;20uF</b>				
		.0007		.0012			.0016				
<b>Insulation Resistance @25°C (&lt;70% RH) for 1 minute at 100VDC applied</b>		15000 M $\Omega$ xuF									
<b>Self Inductance</b>		<1 nano-Henry per mm of body length and lead length									
<b>Dielectric Strength</b>		<b>Terminal to Terminal</b>					<b>Terminal to Case</b>				
		200% of VDC or VAC applied for 10 Seconds and 25°C					3kVAC (50/60 Hz) applied for 60 Seconds and 25°C				
<b>Damp Heat</b>		56 days with no voltage applied at +40C and 93%(+2%) relative humidity									
		<b>Capacitance Change</b>		<+2% of initially measured value							
		<b>Dissipation Factor</b>		<.001 at 1 kHz for C>.1uF							
		<b>Insulation Resistance</b>		>50% of minimum specified value							
<b>Reliability</b>	<b>WVDC</b>	<b>370</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>					
	<b>VAC</b>	160	200	275	320	320	400	400	440	400	500
	<b>Hours</b>	10000	1000	10000	1000	10000	3000	10000	1000	10000	1000
<b>Failure quota</b>		500/10 <sup>9</sup> component hours									
<b>Construction</b>		metallized film									
<b>Coating</b>		Flame Retardant Polyester tape wrap (UL510)with epoxy end fill(UL94V0)									
<b>Lead terminations</b>		Lead Free Tinned Leads									

### Special Order Options



WVDC	370			500			600			700			800		
uF	C $\leq$ 5	5<C<10	C>10	C $\leq$ 3.3	3.3<C<6.8	C>6.8	C<2.5	2.5<C<5	C>4	C $\leq$ 1.5	1.5,C<4	C>4	C<1.2	1.2<C<4	C>4
d	.8	1.0	1.2	.8	1.0	1.2	.8	1.0	1.2	.8	1.0	1.2	.8	1.0	1.2

# MAR

## Axial Lead

WVDC	Capacitance (μF)	IC PART NUMBER	dv/dt (v/μ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims DxL (mm)
370	1	105MARA04KG	50	2.5	23	11x29
370	1.5	155MARA04KG	50	3	18.5	13x29
370	2	205MARA04KG	50	4	15.5	15x29
370	2	205MARA04KJ	40	3.5	17.5	12.5x34
370	2.2	225MARA04KG	50	4	14.5	15x29
370	2.2	225MARA04KJ	40	3.5	16.5	13x34
370	2.5	255MARA04KG	50	4.5	13.4	16x29
370	2.5	255MARA04KJ	40	4	15.2	14x34
370	3	305MARA04KG	50	5	12.2	17x29
370	3	305MARA04KJ	40	4.5	13.7	15x34
370	3.3	335MARA04KJ	40	4.5	13	15.5x34
370	4	405MARA04KJ	40	5.5	11.7	17x34
370	4.7	475MARA04KJ	40	6	10.7	18x34
370	5	505MARA04KJ	40	6	10.2	18.5x34
370	6.8	685MARA04KJ	40	7.5	8.5	21x34
370	10	106MARA04KJ	40	10	6	24x32
370	10	106MARA04KN	25	9.5	7	21.5x46
370	15	156MARA04KN	25	10.5	5.7	25.5x46
370	20	206MARA04KN	25	13.5	5	29x46
370	22	226MARA04KN	25	14	4.7	30.5x46
370	25	256MARA04KN	25	14	4.4	32x46
370	30	306MARA04KR	20	14	4.5	31x55
370	30	306MARA04KS	15	14	5.3	29.5x59
370	33	336MARA04KR	20	14	4.3	32.5x55
370	33	336MARA04KS	15	14	5	31x59
370	40	406MARA04KR	20	14	3.9	36x55
370	40	406MARA04KS	15	14	4.5	33.5x59
370	50	506MARA04KR	20	14	3.5	40x55
370	50	506MARA04KS	15	14	3.9	37x59
370	60	606MARA04KS	15	14	3.5	40x59
500	0.68	684MARA03KG	60	2.5	25	11x29
500	1	105MARA03KG	60	3	20	12.5x29
500	1	105MARA03KJ	45	2.5	22.5	11.5x34
500	1.5	155MARA03KG	60	4	16	15x29
500	1.5	155MARA03KJ	50	3.5	18.2	13.5x34
500	2	205MARA03KG	60	4.5	13.7	16.5x29
500	2	205MARA03KJ	50	4	15.1	15x34
500	2.2	225MARA03KG	60	5	13	17.5x29
500	2.2	225MARA03KJ	50	4.5	14.2	15.5x34
500	2.5	255MARA03KJ	50	5	13.2	17x34
500	3	305MARA03KJ	50	5.5	11.9	18.5x34
500	3.3	335MARA03KJ	50	6	11.3	19x34
500	4	405MARA03KJ	50	7	10.2	21x34
500	4	405MARA03KN	35	6	12.3	17.5x46
500	4.7	475MARA03KJ	50	7.5	9.4	22.5x34
500	4.7	475MARA03KN	35	7	11.1	19x46
500	5	505MARA03KJ	50	7.5	9.1	23x34
500	5	505MARA03KN	35	7	10.5	19.5x46
500	6.8	685MARA03KN	35	8.5	8.7	22x46
500	10	106MARA03KN	35	11	6.7	26x46
500	10	106MARA03KR	25	10.5	7.4	23.5x55
500	12	126MARA03KN	35	12	6.1	28x46
500	12	126MARA03KR	25	11.5	6.7	25x55
500	15	156MARA03KN	35	13.5	5.4	31x46
500	15	156MARA03KR	25	13	6	28x55
500	15	156MARA03KS	20	12.5	6.8	26.5x59
500	20	206MARA03KR	25	14	5.1	31.5x55
500	20	206MARA03KS	20	14	5.8	30x59

WVDC	Capacitance (μF)	IC PART NUMBER	dv/dt (v/μ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims DxL (mm)
500	22	226MARA03KR	25	14	4.8	33x55
500	22	226MARA03KS	20	14	5.4	31x59
500	25	256MARA03KR	25	14	4.5	25x55
500	25	256MARA03KS	20	14	5	33x59
500	30	306MARA03KR	25	14	4.1	38x55
500	30	306MARA03KS	20	14	4.5	36x59
500	33	336MARA03KR	25	14	3.9	39.5x55
500	33	336MARA03KS	20	14	4.3	37.5x59
500	35	356MARA03KR	25	14	3.8	41x55
500	35	356MARA03KS	20	14	4.2	38.5x59
500	40	406MARA03KS	20	14	3.9	41x59
600	0.47	474MARA02KG	90	2.5	24	11x29
600	0.68	684MARA02KG	90	3	19.5	13x29
600	0.68	684MARA02KJ	70	3	21.5	12x34
600	1	105MARA02KG	90	4	15.5	15x29
600	1	105MARA02KJ	70	3.5	17.5	13x34
600	1.5	155MARA02KG	90	5	12.3	17.5x29
600	1.5	155MARA02KJ	70	4.5	14	15.5x34
600	2	205MARA02KJ	70	5.5	11.9	17.5x34
600	2.2	225MARA02KJ	70	6	11.3	18.5x34
600	2.5	255MARA02KJ	70	6	10.5	19x34
600	3	305MARA02KJ	70	7	9.4	21x34
600	3.3	335MARA02KJ	70	7.5	8.9	22x34
600	3.3	335MARA02KN	50	7	10.1	19x46
600	4	405MARA02KJ	70	8.5	7.9	24x32
600	4	405MARA02KN	50	8	9.1	20.5x46
600	4.7	475MARA02KN	50	9	7.7	22x46
600	5	505MARA02KN	50	9	7.5	22.5x46
600	6.8	685MARA02KN	50	11	6.4	26x46
600	10	106MARA02KN	50	13.5	5.4	31x46
600	10	106MARA02KR	35	13.5	6.3	27x55
600	10	106MARA02KS	25	11.5	7.1	26x59
600	12	126MARA02KR	35	14	5.7	29.5x55
600	12	126MARA02KS	25	13	6.5	29x59
600	15	156MARA02KR	35	14	5	33x55
600	15	156MARA02KS	25	14	5.6	31x59
600	20	206MARA02KR	35	14	4.3	37x55
600	20	206MARA02KS	25	14	4.7	35x59
600	22	226MARA02KR	35	14	4.1	39x55
600	22	226MARA02KS	25	14	4.5	37x59
600	25	256MARA02KR	35	14	3.8	41.5x55
600	25	256MARA02KS	25	14	4.2	39x59
700	0.33	334MARA06KG	105	2.5	25	11.5x29
700	0.47	474MARA06KG	105	3	20.5	13x29
700	0.68	684MARA06KG	105	4	16.8	15x29
700	0.68	684MARA06KJ	85	3.5	18.8	13.5x34
700	1	105MARA06KJ	85	4.5	15.4	15.5x34
700	1.5	155MARA06KJ	85	5.5	12.5	18.5x34
700	2	205MARA06KJ	85	6.5	10.6	21x34
700	2	205MARA06KN	60	6	12.5	18x46
700	2.2	225MARA06KJ	85	7	10.1	22x34
700	2.2	225MARA06KN	60	6.5	11.9	19x46
700	2.5	255MARA06KJ	85	7.5	9.4	23x34
700	2.5	255MARA06KN	60	7	11.1	20x46
700	3	305MARA06KN	60	7.5	10.1	21.5x46
700	3.3	335MARA06KN	60	8	9.6	22.5x46
700	4	405MARA06KN	60	9	8.7	24.5x46
700	4.7	475MARA06KN	60	10.5	7.8	26.5x46

# MAR

## Axial Lead

WVDC	Capacitance (μF)	IC PART NUMBER	dv/dt (v/μ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims DxL (mm)
700	5	505MARA06KN	60	10.5	7.3	27x46
700	5	505MARA06KR	45	9.5	8.6	23.5x55
700	5	505MARA06KS	35	9.5	9.5	22.5x59
700	6.8	685MARA06KN	60	12.5	6.3	30.5x46
700	6.8	685MARA06KR	45	11.5	7.4	27x55
700	6.8	685MARA06KS	35	11	8.2	25.5x59
700	10	106MARA06KR	45	14	6.1	32x55
700	10	106MARA06KS	35	13.5	6.8	30x59
700	12	126MARA06KR	45	14	5.5	35x55
700	12	126MARA06KS	35	14	6.1	33x59
700	15	156MARA06KR	45	14	4.9	36.5x55
700	15	156MARA06KS	35	14	5.4	26.5x59
700	18	186MARA06KR	45	14	4.5	41.5x55
700	18	186MARA06KS	35	14	4.9	39.5x59
700	20	206MARA06KS	35	14	4.7	41.5x59
800	0.22	224MARA01KG	120	2	29	11x29
800	0.33	334MARA01KG	120	2.5	23.5	11.5x29
800	0.47	474MARA01KG	120	3.5	19	14.5x29
800	0.47	474MARA01KJ	100	3	22.5	12.5x34
800	0.68	684MARA01KG	120	4	15.8	16.5x29
800	0.68	684MARA01KJ	100	4	18	14x34
800	1	105MARA01KJ	100	5	14.8	17.5x34
800	1.2	125MARA01KJ	100	5.5	13.4	19x34
800	1.5	155MARA01KJ	100	6	11.5	20x34

WVDC	Capacitance (μF)	IC PART NUMBER	dv/dt (v/μ sec.)	Maximum RMS Ripple Current (A) 100 kHz, +70°C	Typical ESR (mΩ) 100 kHz, +25°C	Dims DxL (mm)
800	2	205MARA01KJ	100	7.5	9.8	23.5x34
800	2	205MARA01KN	65	7	11.5	20x46
800	2.2	225MARA01KJ	100	7.5	9.3	24.5x34
800	2.2	225MARA01KN	65	7.5	10.7	21x46
800	2.5	255MARA01KN	65	8	10	22x46
800	3	305MARA01KN	65	9	9	24x46
800	3.3	335MARA01KN	65	9.5	8.5	25x46
800	4	405MARA01KN	65	10.5	7.5	27x46
800	4	405MARA01KR	50	10	8.8	24x55
800	4	405MARA01KS	40	9.5	9.7	22.5x59
800	4.7	475MARA01KN	65	12	6.6	29x46
800	4.7	475MARA01KR	50	11	7.7	26.5x55
800	4.7	475MARA01KS	40	10.5	8.6	24.5x59
800	5	505MARA01KN	65	12.5	6.3	29.5x46
800	5	505MARA01KR	50	11.5	7.4	27x55
800	5	505MARA01KS	40	11	8.3	25x59
800	6.8	685MARA01KR	50	13	6.5	30x55
800	6.8	685MARA01KS	40	12.5	7.3	28.5x59
800	10	106MARA01KR	50	14	5.4	35x55
800	10	106MARA01KS	40	14	6.1	33.5x59
800	12.5	126MARA01KR	50	14	4.9	40.5x55
800	12.5	126MARA01KS	40	14	5.5	37.5x59
800	15	156MARA01KS	40	14	5.1	41x59