

## High Capacitance Oval Wrap and Fill

New: High capacitance, simple design. Supporting DC voltages up to 3000VDC, with high current handling capability.



### FEATURES

- High voltage ratings
- Simple construction
- Two types of terminals
- RoHS Compliant

### STANDARD CONFIGURATION

- UP22: axial leads
- UP26: radial tabs/low profile
- UP27: radial tabs/high profile

# Specification Summary

## Capacitance Range

2.0 $\mu$ F to 85.0 $\mu$ F

## Capacitance Tolerance

Standard capacitance tolerance is  $\pm 5\%$ .

## Operating Temperature Range

-55°C to +85°C (+105°C upon special request)

## Enclosure/Construction

Polyester tape wrap with potted endfill

## Voltage Rating

500 VDC to 3000 VDC

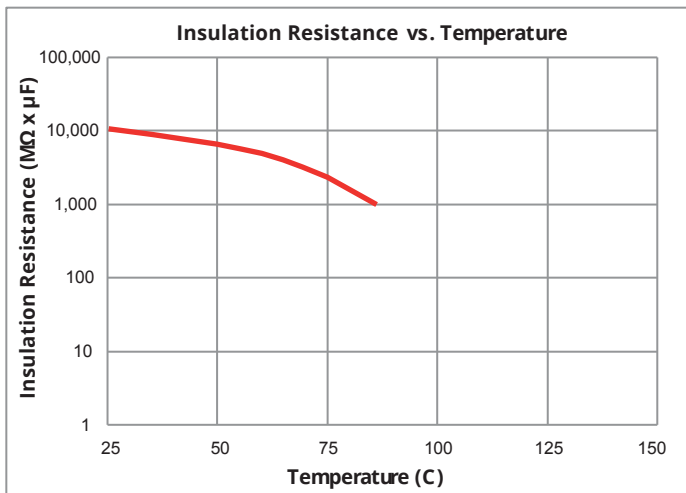
## Quality Control

### Environmental

Parameter	Method	Condition
Vibration	204	D
Shock	213	I
Humidity	106	-
Thermal Shock	107	A
Life	108	F

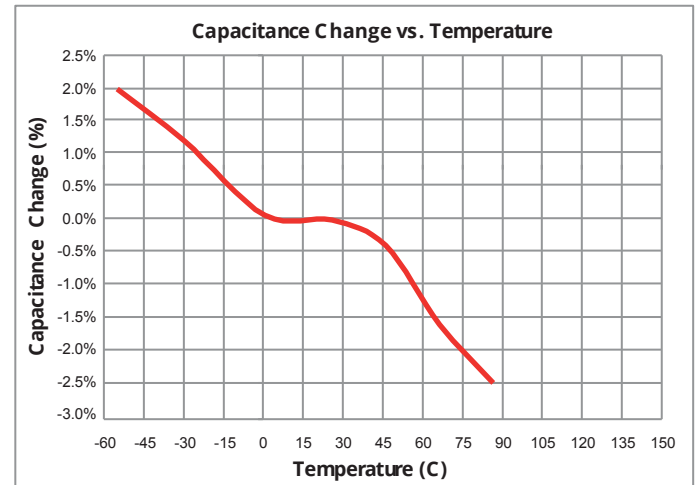
Reference MIL-STD-202

# Characteristics



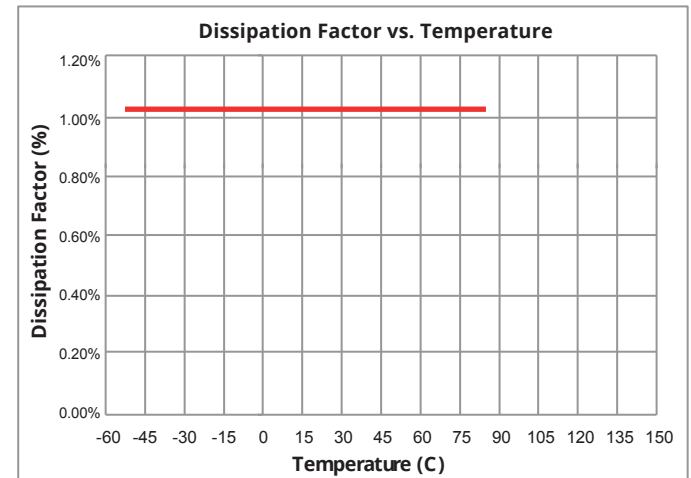
## Dielectric Strength

Capacitors withstand a DC potential of 120% rated voltage for one (1) minute without damage or breakdown. Test voltage is applied and discharged through a resistance of 1 OHM per volt minimum, and at 25°C.



## Dissipation Factor

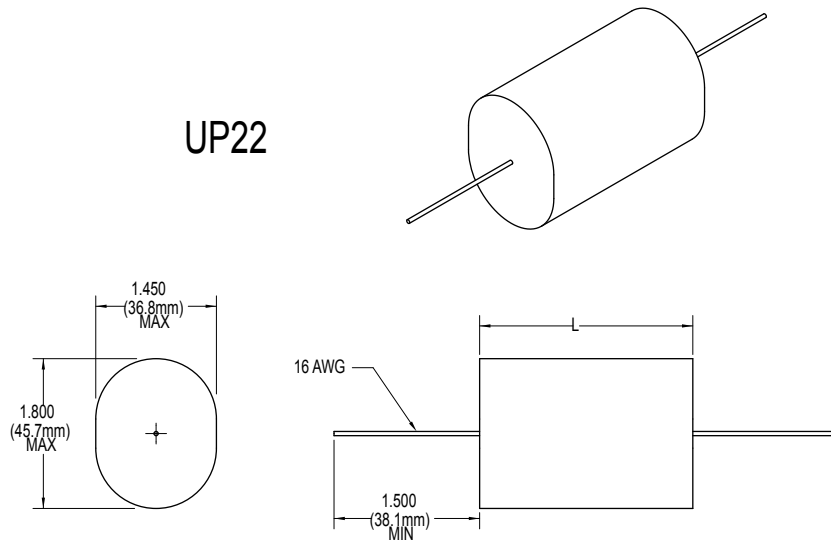
Polypropylene has an intrinsic dissipation factor of less than  $2.1 \times 10^{-4}$  over the operating temperature range of -55°C to +105°C and frequencies to 1MHz.



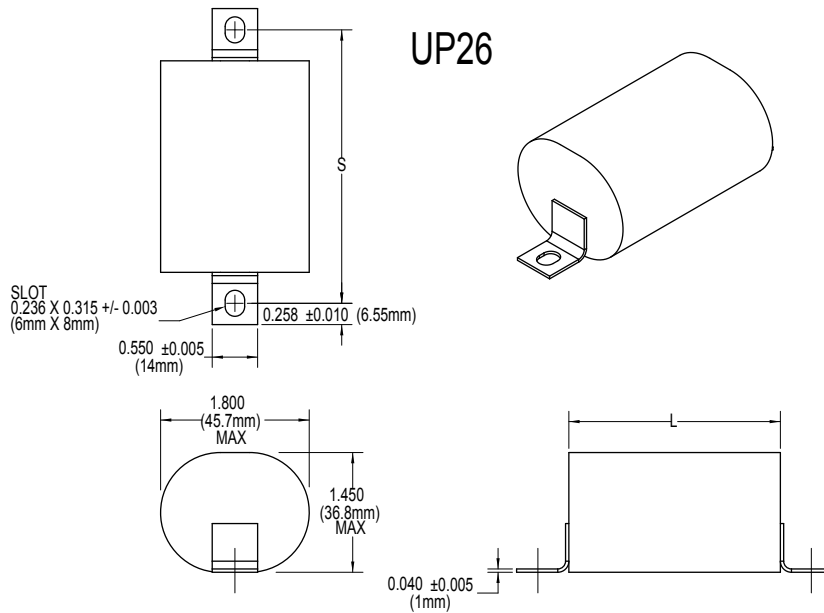
# Detail Data

PART NUMBER	VOLTAGE	CAP μF	"L" MAX		"S"		ESR mOhms	ESL nH	I PEAK AMPS	dv/dt V/μs	Fres kHz	CURRENT (100kHz)		
	VDC		(in)	(mm)	(in)	(mm)						25°C	55°C	85°C
UP2_BA356J	500	35.0	1.562	39.7	2.246	57.0	4	28	1629	47	160.8	37.7	29.9	19.3
UP2_BA506J	500	50.0	1.812	46.0	2.565	65.2	5	37	1634	33	117.0	35.5	28.2	18.2
UP2_BA706J	500	70.0	2.312	58.7	3.033	77.0	6	50	1592	23	85.1	32.4	25.7	16.5
UP2_BA856J	500	85.0	2.562	65.1	3.315	84.2	7	58	1639	19	71.7	31.9	25.4	16.3
UP2_BC256J	600	25.0	1.562	39.7	2.246	57.0	5	28	1330	53	190.2	33.3	26.4	17.0
UP2_BC406J	600	40.0	1.812	46.0	2.565	65.2	5	37	1494	37	130.8	34.5	27.4	17.6
UP2_BC556J	600	55.0	2.312	58.7	3.033	77.0	7	50	1429	26	96.0	30.9	24.6	15.8
UP2_BC656J	600	65.0	2.562	65.1	3.315	84.2	8	58	1433	22	82.0	29.9	23.7	15.3
UP2_BG226J	800	22.0	1.562	39.7	2.246	57.0	5	28	1316	60	202.8	34.3	27.3	17.5
UP2_BG306J	800	30.0	1.812	46.0	2.565	65.2	6	37	1261	42	151.1	31.1	24.7	15.9
UP2_BG456J	800	45.0	2.312	58.7	3.033	77.0	8	50	1316	29	106.1	30.0	23.8	15.3
UP2_BG506J	800	50.0	2.562	65.1	3.315	84.2	9	58	1240	25	93.5	27.5	21.9	14.1
UP2_BJ186J	900	18.0	1.562	39.7	2.246	57.0	5	28	1197	66	224.2	32.9	26.1	16.8
UP2_BJ256J	900	25.0	1.812	46.0	2.565	65.2	7	37	1167	47	165.5	30.2	24.0	15.4
UP2_BJ356J	900	35.0	2.312	58.7	3.033	77.0	9	50	1137	32	120.3	27.5	21.9	14.1
UP2_BJ456J	900	45.0	2.562	65.1	3.315	84.2	9	58	1240	28	98.5	28.5	22.6	14.5
UP2_BL156J	1000	15.0	1.562	39.7	2.246	57.0	6	28	1097	73	245.6	31.5	25.1	16.1
UP2_BL206J	1000	20.0	1.812	46.0	2.565	65.2	8	37	1027	51	185.0	28.1	22.3	14.3
UP2_BL306J	1000	30.0	2.312	58.7	3.033	77.0	9	50	1072	36	129.9	27.0	21.5	13.8
UP2_BL356J	1000	35.0	2.562	65.1	3.315	84.2	11	58	1061	30	111.7	25.8	20.5	13.2
UP2_BN126J	1200	12.0	1.562	39.7	2.246	57.0	6	28	957	80	274.6	29.0	23.0	14.8
UP2_BN186J	1200	18.0	1.812	46.0	2.565	65.2	8	37	1008	56	195.0	28.4	22.6	14.5
UP2_BN256J	1200	25.0	2.312	58.7	3.033	77.0	10	50	975	39	142.4	25.7	20.4	13.1
UP2_BN306J	1200	30.0	2.562	65.1	3.315	84.2	12	58	992	33	120.7	25.1	20.0	12.8
UP2_BR905J	1400	9.0	1.562	39.7	2.246	57.0	7	28	838	93	317.0	27.3	21.7	13.9
UP2_BR136J	1400	13.0	1.812	46.0	2.565	65.2	9	37	850	65	229.5	26.0	20.6	13.3
UP2_BR186J	1400	18.0	2.312	58.7	3.033	77.0	12	50	819	45	167.8	23.4	18.6	12.0
UP2_BR226J	1400	22.0	2.562	65.1	3.315	84.2	13	58	848	39	140.9	23.2	18.5	11.9
UP2_BT705J	1600	7.0	1.562	39.7	2.246	57.0	8	28	745	106	359.5	25.9	20.5	13.2
UP2_BT106J	1600	10.0	1.812	46.0	2.565	65.2	10	37	747	75	261.6	24.4	19.4	12.5
UP2_BT146J	1600	14.0	2.312	58.7	3.033	77.0	14	50	728	52	190.2	22.2	17.6	11.3
UP2_BT176J	1600	17.0	2.562	65.1	3.315	84.2	15	58	749	44	160.3	21.9	17.4	11.2
UP2_BX505J	1800	5.0	1.562	39.7	2.246	57.0	10	28	598	120	425.4	22.4	17.8	11.5
UP2_BX805J	1800	8.0	1.812	46.0	2.565	65.2	11	37	672	84	292.5	23.2	18.4	11.9
UP2_BX116J	1800	11.0	2.312	58.7	3.033	77.0	16	50	643	58	214.6	20.8	16.5	10.6
UP2_BX136J	1800	13.0	2.562	65.1	3.315	84.2	18	58	645	50	183.3	20.1	16.0	10.3
UP2_CA405J	2000	4.0	1.562	39.7	2.246	57.0	12	28	532	133	475.6	21.0	16.7	10.8
UP2_CA605J	2000	6.0	1.812	46.0	2.565	65.2	14	37	560	93	337.8	20.7	16.4	10.6
UP2_CA905J	2000	9.0	2.312	58.7	3.033	77.0	17	50	585	65	237.3	19.9	15.8	10.2
UP2_CA116J	2000	11.0	2.562	65.1	3.315	84.2	19	58	606	55	199.3	19.8	15.7	10.1
UP2_CB305J	2400	3.0	1.562	39.7	2.246	57.0	13	28	479	160	549.1	20.5	16.3	10.5
UP2_CB405J	2400	4.0	1.812	46.0	2.565	65.2	17	37	448	112	413.7	18.3	14.5	9.3
UP2_CB605J	2400	6.0	2.312	58.7	3.033	77.0	21	50	468	78	290.6	17.6	14.0	9.0
UP2_CB705J	2400	7.0	2.562	65.1	3.315	84.2	25	58	463	66	249.8	16.8	13.4	8.6
UP2_CD205J	3000	2.0	1.562	39.7	2.246	57.0	15	28	399	199	672.6	19.0	15.1	9.7
UP2_CD255J	3000	2.5	1.812	46.0	2.565	65.2	22	37	350	140	523.3	16.0	12.7	8.2
UP2_CD405J	3000	4.0	2.312	58.7	3.033	77.0	26	50	390	97	355.9	16.3	12.9	8.3
UP2_CD505J	3000	5.0	2.562	65.1	3.315	84.2	28	58	413	83	295.5	16.5	13.1	8.4

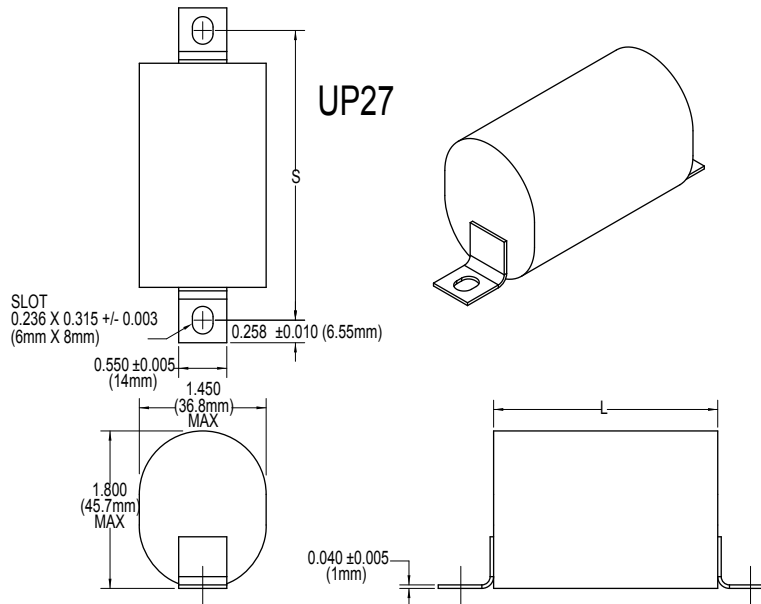
## UP22



## UP26



## UP27



## Additional Information

The UP2 is an Unlytic<sup>®</sup> polypropylene in an oval polyester wrap with potted end fill. Terminals are RoHS compliant tin plated copper.

## How to Order

TYPE UNLYTIC <sup>®</sup> Polypropylene	→	<b>UP2</b>
STYLE 2: Axial Lead or 6: radial tabs/low profile or 7: radial tabs/high profile	→	<b>2</b>
VOLTAGE DC Voltage Rating: BA = 500, BC = 600 etc.	→	<b>BA</b>
CAPACITANCE IN PICO FARADS The first two digits are significant, the third represents the number of zeros (e.g 356=350,000,000pF)	→	<b>356</b>
TOLERANCE J = ±5% Other tolerances available.	→	<b>J</b>

### Marking And Date Code

All capacitors are marked with company initials "EC", corporate logo or EC trademark—in addition to type UP2, capacitance, tolerance, rated DC working voltage and date code. The first two digits of the date code represent the year, the second two digits the week, i.e., 1252 is the 52nd week of 2012, 1202 is the second week of 2012.

### Quality Assurance

Major emphasis is placed on quality assurance. EC is an ISO 9001 and AS9100 Certified Company. Raw material inspection and the use of SPC manufacturing procedures assure the highest quality standards. Procedures are fully described in the EC Quality Control Manual. Electronic Concepts will continue to advance the state-of-the-art by utilizing leading edge technology, compact capacitor designs and establishing reliability procedures.

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