

## SMD Metallized Polyester Film Capacitor

### Related Document: IEC 60384-19

**MAIN APPLICATIONS:**

Blocking, bypassing, filtering and timing, high frequency coupling and decoupling. Interference suppression in low voltage applications

**SIZE CODES:**

2220, 2824, 4036, 5045, 6560

**MARKING:**

Type/ C-value/ rated voltage/ tolerance/ date of manufacture (chip length  $\geq 7.3\text{mm}$ )

**DIELECTRIC:**

Polyester film

**ELECTRODES:**

Vacuum deposited aluminum

**COATING:**

Flame retardant plastic case material (UL-class 94 V-0), color white, epoxy resin sealed

**CONSTRUCTION:**

Metallized polyester film

**CONTACTS:**

Tinned terminals

**IEC TEST CLASSIFICATION:**

55/100/56, according to IEC 60068

**OPERATING TEMPERATURE RANGE:**

- 55°C to + 100°C

**CAPACITANCE RANGE:**

1000pF to 10 $\mu$ F

**CAPACITANCE TOLERANCES:**

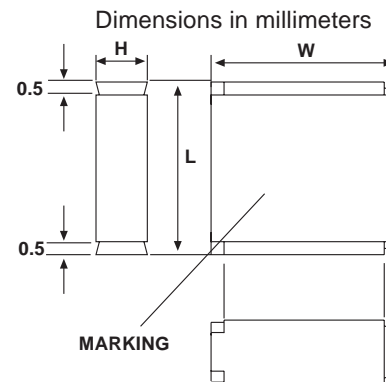
$\pm 10\%$  (K), -5% (J)

**RATED VOLTAGES ( $U_R$ ):**

50VDC, 63VDC, 100VDC, 250VDC, 400VDC

**DISSIPATION FACTOR TAN  $\delta$ :**

MEASURED AT	$C \leq 0.1\mu\text{F}$	$0.1\mu\text{F} < C \leq 1.0\mu\text{F}$	$C > 1.0\mu\text{F}$
1kHz	$8 \times 10^{-3}$	$8 \times 10^{-3}$	$8 \times 10^{-3}$
10kHz	$12 \times 10^{-3}$	$12 \times 10^{-3}$	$15 \times 10^{-3}$
100kHz	$25 \times 10^{-3}$	$30 \times 10^{-3}$	
Maximum values at + 23°C			



Components may be vertically mounted for decreased footprint. See page 8 (tape packaging information).

**PERMISSIBLE AC VOLTAGES (RMS) UP TO 60Hz:**

30VAC, 40VAC, 63VAC, 160VAC, 200VAC

**TEST VOLTAGE:**

$1.6 \times U_R$  for 60 s

**INSULATION RESISTANCE:**

Measured at + 20°C acc. to IEC 60384-19

**for  $C \leq 0.33\mu\text{F}$  and  $U_R > 100\text{VDC}$**

30 000 M $\Omega$  minimum value

**for  $C \leq 0.33\mu\text{F}$  and  $U_R \leq 100\text{VDC}$**

10 000 M $\Omega$  minimum value

**TIME CONSTANT:**

Measured at + 20°C acc. to IEC 60384-19

**for  $> 0.33\mu\text{F}$  and  $U_R > 100\text{VDC}$**

10 000 s minimum value

**for  $C > 0.33\mu\text{F}$  and  $U_R \leq 100\text{VDC}$**

3000 s minimum value

**DERATING FOR DC AND AC.**

**CATEGORY VOLTAGE  $U_C$ :**

1.25% per °C starting at + 85°C

**MAXIMUM PULSE RISE TIME:**

Values refer to table. If the max. pulse voltage is less than the rated voltage, the specified dv/dt can be multiplied by  $U_R/U$ .

CAPACITANCE	CAPACITANCE CODE	50VDC/30VAC VOLTAGE CODE 05 CHIP LENGTH 5.7mm SIZE CODE A					50VDC/30 VAC VOLTAGE CODE 05 CHIP LENGTH 7.3mm SIZE CODE B					50VDC/30VAC VOLTAGE CODE 05 CHIP LENGTH 10.2, 12.7 AND 16.5mm SIZE CODE C, D AND E				
		Dim (mm) ±0.2			Qty	max du/dt	Dim (mm) ±0.2			Qty	max du/dt	Dim (mm) ±0.2			Qty	max du/dt
		W	H	L	Reel	V/μs	W	H	L	Reel	V/μs	W	H	L	Reel	V/μs
1000pF	-210	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	-	-	-	-	-
1500pF	-215	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	-	-	-	-	-
2200pF	-222	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	-	-	-	-	-
3300pF	-233	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	-	-	-	-	-
4700pF	-247	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	-	-	-	-	-
6800pF	-268	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	40	-	-	-	-	-
0.01μF	-310	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	40	-	-	-	-	-
0.015μF	-315	5.0	2.5	5.7	3100	30	6.0	2.5	7.3	3100	40	-	-	-	-	-
0.022μF	-322	5.0	2.5	5.7	3100	30	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.033μF	-333	5.0	2.5	5.7	3100	30	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.047μF	-347	5.0	2.5	5.7	3100	30	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.068μF	-368	5.0	2.5	5.7	3100	20	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.10μF	-410	5.0	2.5	5.7	3100	20	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	30
0.15μF	-415	5.0	3.0	5.7	2400	20	6.0	2.5	7.3	3100	25	9.1	5.5	10.2	800	30
0.22μF	-422	5.0	4.0	5.7	2100	20	6.0	3.0	7.3	2500	25	9.1	5.5	10.2	800	20
0.33μF	-433	-	-	-	-	-	6.0	3.5	7.3	2300	25	9.1	5.5	10.2	800	20
0.47μF	-447	-	-	-	-	-	6.0	3.5	7.3	2300	25	9.1	5.5	10.2	800	20
0.68μF	-468	-	-	-	-	-	6.0	4.5	7.3	1700	12	9.1	5.5	10.2	800	12
1.0μF	-510	-	-	-	-	-	6.0	4.5	7.3	1700	12	9.1	5.5	10.2	800	12
1.5μF	-515	-	-	-	-	-	-	-	-	-	-	9.1	5.5	10.2	800	12
2.2μF	-522	-	-	-	-	-	-	-	-	-	-	9.1	5.5	10.2	800	12
3.3μF	-533	-	-	-	-	-	-	-	-	-	-	11.5	6.5	12.7	600	8
4.7μF	-547	-	-	-	-	-	-	-	-	-	-	11.5	6.5	12.7	600	8
6.8μF	-568	-	-	-	-	-	-	-	-	-	-	15.0	7.0	16.5	500	5
10.0μF	-610	-	-	-	-	-	-	-	-	-	-	15.0	7.0	16.5	500	5

Further C-values upon request

**ORDERING CODES**

EQUIVALENT SIZE CODES	HORIZONTAL MOUNTING			VERTICAL MOUNTING (OPTIONAL)		
	ORDERING SIZE CODES	BOX SIZE		ORDERING SIZE CODE	BOX SIZE	
		W	L		W	L
2220	A	5.0	5.7	-	-	-
2824	B	6.0	7.3	-	-	-
4036	C	9.1	10.2	CV	5.5	10.2
5045	D	11.5	12.7	DV	6.5	12.7
6560	E	15.0	16.5	EV	7.0	16.5

Dimensions in mm

Ordering code examples

Packaging for horizontal mounting:

MKT 1804-410-055-C

Packaging for vertical mounting:

MKT 1804-410-055-CV



CAPACITANCE	CAPACITANCE CODE	63VDC/40VAC VOLTAGE CODE 06 CHIP LENGTH 7.3mm SIZE CODE B					63VDC/40VAC VOLTAGE CODE 06 CHIP LENGTH 10.2, 12.7 AND 16.5mm SIZE CODE C, D AND E				
		Dim	(mm)	±0.2	Qty	max du/dt	Dim	(mm)	±0.2	Qty	max du/dt
		W	H	L	Reel	V/μs	W	H	L	Reel	V/μs
1000pF	-210	6.0	2.5	7.3	3100	50	–	–	–	–	–
1500pF	-215	6.0	2.5	7.3	3100	50	–	–	–	–	–
2200pF	-222	6.0	2.5	7.3	3100	50	–	–	–	–	–
3300pF	-233	6.0	2.5	7.3	3100	50	–	–	–	–	–
4700pF	-247	6.0	2.5	7.3	3100	50	–	–	–	–	–
6800pF	-268	6.0	2.5	7.3	3100	40	–	–	–	–	–
0.01μF	-310	6.0	2.5	7.3	3100	40	–	–	–	–	–
0.015μF	-315	6.0	2.5	7.3	3100	40	–	–	–	–	–
0.022μF	-322	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.033μF	-333	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.047μF	-347	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.068μF	-368	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.10μF	-410	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	30
0.15μF	-415	6.0	2.5	7.3	3100	25	9.1	5.5	10.2	800	30
0.22μF	-422	6.0	3.0	7.3	2500	25	9.1	5.5	10.2	800	20
0.33μF	-433	6.0	3.5	7.3	2300	25	9.1	5.5	10.2	800	20
0.47μF	-447	6.0	3.5	7.3	2300	25	9.1	5.5	10.2	800	20
0.68μF	-468	6.0	3.5	7.3	2300	25	9.1	5.5	10.2	800	12
1.0μF	-510	–	–	–	–	–	9.1	5.5	10.2	800	12
1.5μF	-515	–	–	–	–	–	9.1	5.5	10.2	800	12
2.2μF	-522	–	–	–	–	–	11.5	6.5	12.7	600	8
3.3μF	-533	–	–	–	–	–	11.5	6.5	12.7	600	8
4.7μF	-547	–	–	–	–	–	15.0	7.0	16.5	500	5

Further C-values upon request

**ORDERING CODES**

EQUIVALENT SIZE CODES	HORIZONTAL MOUNTING			VERTICAL MOUNTING (OPTIONAL)		
	ORDERING SIZE CODES	BOX SIZE		ORDERING SIZE CODE	BOX SIZE	
		W	L		W	L
2220	A	5.0	5.7	–	–	–
2824	B	6.0	7.3	–	–	–
4036	C	9.1	10.2	CV	5.5	10.2
5045	D	11.5	12.7	DV	6.5	12.7
6560	E	15.0	16.5	EV	7.0	16.5

Dimensions in mm

Ordering code examples

Packaging for horizontal mounting:

MKT 1804-510-065-C

Packaging for vertical mounting:

MKT 1804-510-065-CV

CAPACITANCE	CAPACITANCE CODE	100VDC/63VAC VOLTAGE CODE 01 CHIP LENGTH 5.7mm SIZE CODE A					100VDC/63VAC VOLTAGE CODE 01 CHIP LENGTH 7.3mm SIZE CODE B					100VDC/63VAC VOLTAGE CODE 01 CHIP LENGTH 10.2, 12.7 AND 16.5mm SIZE CODE C, D AND E				
		Dim (mm) ±0.2			Qty	max du/dt	Dim (mm)±0.2			Qty	max du/dt	Dim (mm) ±0.2			Qty	max du/dt
		W	H	L	Reel	V/μs	W	H	L	Reel	V/μs	W	H	L	Reel	V/μs
1000pF	-210	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
1500pF	-215	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
2200pF	-222	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
3300pF	-233	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
4700pF	-247	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
6800pF	-268	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	40	–	–	–	–	–
0.01μF	-310	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	40	–	–	–	–	–
0.015μF	-315	5.0	2.5	5.7	3100	30	6.0	2.5	7.3	3100	40	–	–	–	–	–
0.022μF	-322	5.0	2.5	5.7	3100	30	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.033μF	-333	5.0	2.5	5.7	3100	30	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.047μF	-347	5.0	2.5	5.7	3100	30	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.068μF	-368	5.0	3.0	5.7	2400	30	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	40
0.10μF	-410	5.0	4.0	5.7	2100	30	6.0	2.5	7.3	3100	30	9.1	5.5	10.2	800	30
0.15μF	-415	–	–	–	–	–	6.0	3.5	7.3	2300	30	9.1	5.5	10.2	800	30
0.22μF	-422	–	–	–	–	–	6.0	4.5	7.3	1700	30	9.1	5.5	10.2	800	20
0.33μF	-433	–	–	–	–	–	–	–	–	–	–	9.1	5.5	10.2	800	20
0.47μF	-447	–	–	–	–	–	–	–	–	–	–	9.1	5.5	10.2	800	20
0.68μF	-468	–	–	–	–	–	–	–	–	–	–	11.5	6.5	12.7	600	12
1.0μF	-510	–	–	–	–	–	–	–	–	–	–	11.5	6.5	12.7	600	12
1.5μF	-515	–	–	–	–	–	–	–	–	–	–	15.0	7.0	16.5	500	8
2.2μF	-522	–	–	–	–	–	–	–	–	–	–	15.0	7.0	16.5	500	8
3.3μF	-533	–	–	–	–	–	–	–	–	–	–	15.0	7.0	16.5	500	8

Further C-values upon request

**ORDERING CODES**

EQUIVALENT SIZE CODES	HORIZONTAL MOUNTING			VERTICAL MOUNTING (OPTIONAL)		
	ORDERING SIZE CODES	BOX SIZE		ORDERING SIZE CODE	BOX SIZE	
		W	L		W	L
2220	A	5.0	5.7	–	–	–
2824	B	6.0	7.3	–	–	–
4036	C	9.1	10.2	CV	5.5	10.2
5045	D	11.5	12.7	DV	6.5	12.7
6560	E	15.0	16.5	EV	7.0	16.5

Dimensions in mm

Ordering code examples

Packaging for horizontal mounting:

MKT 1804-533-015-E

Packaging for vertical mounting:

MKT 1804-533-015-EV



CAPACITANCE	CAPACITANCE CODE	250VDC/160VAC VOLTAGE CODE 25 CHIP LENGTH 5.7mm SIZE CODE A					250VDC/160VAC VOLTAGE CODE 25 CHIP LENGTH 7.3mm SIZE CODE B					250VDC/160VAC VOLTAGE CODE 25 CHIP LENGTH 10.2, 12.7 AND 16.5mm SIZE CODE C, D AND E				
		Dim (mm) ±0.2			Qty	max du/dt	Dim (mm)±0.2			Qty	max du/dt	Dim (mm) ±0.2			Qty	max du/dt
		W	H	L	Reel	V/μs	W	H	L	Reel	V/μs	W	H	L	Reel	V/μs
1000pF	-210	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
1500pF	-215	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
2200pF	-222	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
3300pF	-233	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
4700pF	-247	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	50	–	–	–	–	–
6800pF	-268	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	40	–	–	–	–	–
0.01μF	-310	5.0	2.5	5.7	3100	40	6.0	2.5	7.3	3100	40	–	–	–	–	–
0.015μF	-315	5.0	3.0	5.7	2400	40	6.0	2.5	7.3	3100	40	–	–	–	–	–
0.022μF	-322	5.0	4.0	5.7	2100	40	6.0	3.0	7.3	2500	40	9.1	5.5	10.2	800	40
0.033μF	-333	–	–	–	–	–	6.0	3.5	7.3	2300	40	9.1	5.5	10.2	800	40
0.047μF	-347	–	–	–	–	–	6.0	4.5	7.3	1700	40	9.1	5.5	10.2	800	40
0.068μF	-368	–	–	–	–	–	–	–	–	–	–	9.1	5.5	10.2	800	40
0.10μF	-410	–	–	–	–	–	–	–	–	–	–	9.1	5.5	10.2	800	30
0.15μF	-415	–	–	–	–	–	–	–	–	–	–	9.1	5.5	10.2	800	30
0.22μF	-422	–	–	–	–	–	–	–	–	–	–	11.5	6.5	12.7	600	20
0.33μF	-433	–	–	–	–	–	–	–	–	–	–	11.5	6.5	12.7	600	20
0.47μF	-447	–	–	–	–	–	–	–	–	–	–	11.5	6.5	12.7	600	20
0.68μF	-468	–	–	–	–	–	–	–	–	–	–	15.0	7.0	16.5	500	12
1.0μF	-510	–	–	–	–	–	–	–	–	–	–	15.0	7.0	16.5	500	12

Further C-values upon request

**ORDERING CODES**

EQUIVALENT SIZE CODES	HORIZONTAL MOUNTING			VERTICAL MOUNTING (OPTIONAL)		
	ORDERING SIZE CODES	BOX SIZE		ORDERING SIZE CODE	BOX SIZE	
		W	L		W	L
2220	A	5.0	5.7	–	–	–
2824	B	6.0	7.3	–	–	–
4036	C	9.1	10.2	CV	5.5	10.2
5045	D	11.5	12.7	DV	6.5	12.7
6560	E	15.0	16.5	EV	7.0	16.5

Dimensions in mm

Ordering code examples

Packaging for horizontal mounting:

MKT 1804-410-255-C

Packaging for vertical mounting:

MKT 1804-410-255-CV

CAPACITANCE	CAPACITANCE CODE	400VDC/200VAC VOLTAGE CODE 40 CHIP LENGTH 7.3mm SIZE CODE B					400VDC/200VAC VOLTAGE CODE 40 CHIP LENGTH 10.2, 12.7 AND 16.5mm SIZE CODE C, D AND E						
		Dim	(mm)		±0.2	Qty	max du/dt	Dim	(mm)		±0.2	Qty	max du/dt
		W	H	L	Reel	V/μs	W	H	L	Reel	V/μs		
1000pF	-210	6.0	2.5	7.3	3100	50	–	–	–	–	–	–	
1500pF	-215	6.0	2.5	7.3	3100	50	–	–	–	–	–	–	
2200pF	-222	6.0	2.5	7.3	3100	50	–	–	–	–	–	–	
3300pF	-233	6.0	2.5	7.3	3100	50	–	–	–	–	–	–	
4700pF	-247	6.0	2.5	7.3	3100	50	–	–	–	–	–	–	
6800pF	-268	6.0	3.0	7.3	2500	50	–	–	–	–	–	–	
0.01μF	-310	6.0	3.5	7.3	2300	50	–	–	–	–	–	–	
0.015μF	-315	6.0	4.5	7.3	1700	50	–	–	–	–	–	–	
0.022μF	-322	–	–	–	–	–	9.1	5.5	10.2	800	40	40	
0.033μF	-333	–	–	–	–	–	9.1	5.5	10.2	800	40	40	
0.047μF	-347	–	–	–	–	–	9.1	5.5	10.2	800	40	40	
0.068μF	-368	–	–	–	–	–	9.1	5.5	10.2	800	40	40	
0.10μF	-410	–	–	–	–	–	11.5	6.5	12.7	600	30	30	
0.15μF	-415	–	–	–	–	–	11.5	6.5	12.7	600	30	30	
0.22μF	-422	–	–	–	–	–	15.0	7.0	16.5	500	20	20	
0.33μF	-433	–	–	–	–	–	15.0	7.0	16.5	500	20	20	
0.47μF	-447	–	–	–	–	–	15.0	7.0	16.5	500	20	20	

Further C-values upon request

**ORDERING CODES**

EQUIVALENT SIZE CODES	HORIZONTAL MOUNTING			VERTICAL MOUNTING (OPTIONAL)		
	ORDERING SIZE CODES	BOX SIZE		ORDERING SIZE CODE	BOX SIZE	
		W	L		W	L
2220	A	5.0	5.7	–	–	–
2824	B	6.0	7.3	–	–	–
4036	C	9.1	10.2	CV	5.5	10.2
5045	D	11.5	12.7	DV	6.5	12.7
6560	E	15.0	16.5	EV	7.0	16.5

Dimensions in mm

Ordering code examples

Packaging for horizontal mounting:

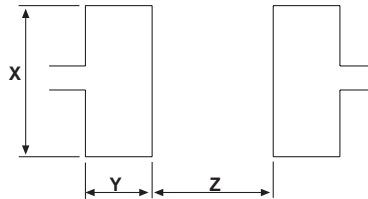
MKT 1804-410-405-D

Packaging for vertical mounting:

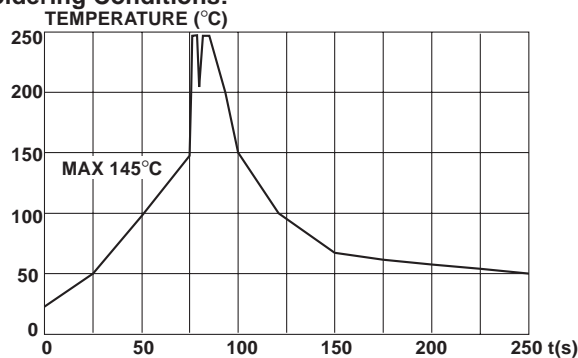
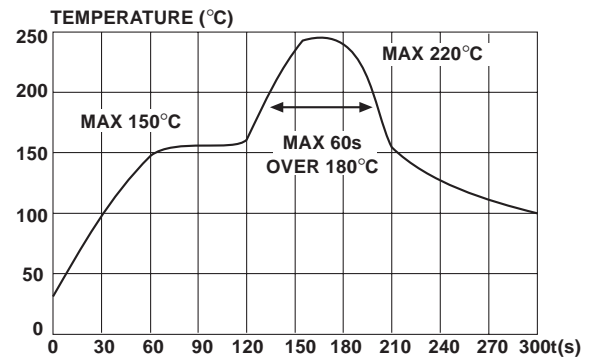
MKT 1804-410-405-DV

**SOLDERING OF SMD CAPACITORS**

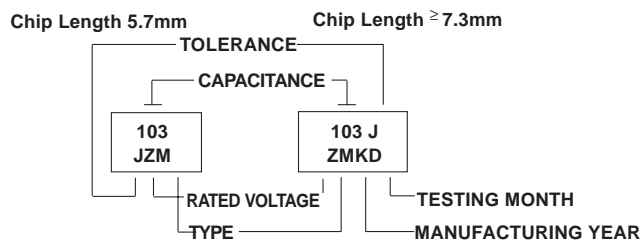
Recommended soldering pad sizes:



ORDERING SIZE CODE	HORIZONTAL MOUNTING					VERTICAL MOUNTING (OPTIONAL)					
	BOX SIZE		LANDING PADS			ORDERING SIZE CODE	BOX SIZE		LANDING PADS		
	W	L	X	Y	Z			W	L	X	Y
A	5.0	5.7	1.7-5.0	1.5	4.5	-	-	-	-	-	-
B	6.0	7.3	2.0-6.0	1.5	6.0	-	-	-	-	-	-
C	9.1	10.2	3.0-9.1	2.0	9.0	CV	5.5	10.2	1.9-5.5	2.0	9.0
D	11.5	12.7	4.0-11.5	2.5	11.5	DV	6.5	12.7	2.2-6.5	2.5	11.5
E	15.0	16.5	5.0-15.0	3.0	15.0	EV	7.0	16.5	2.4-7.0	3.0	15.0

**Soldering Conditions:**

 RECOMMENDED WAVE SOLDERING PROFILE,  
 TOTAL TIME IN SOLDER WAVE <5S


RECOMMENDED REFLOW SOLDERING PROFILE

**MARKING OF SMD CAPACITORS**

 The nominal **capacitance** value is given with 3 digits.

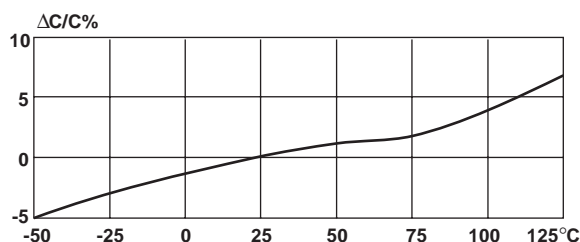
 Example: 103 =  $10 \times 10^3 \text{pF} = 10000 \text{pF} = 10 \text{nF} = 0.01 \mu\text{F}$ 

 The capacitance **tolerance** is expressed with letter codes:  
 $\pm 10\%$  (K),  $\pm 5\%$  (J)

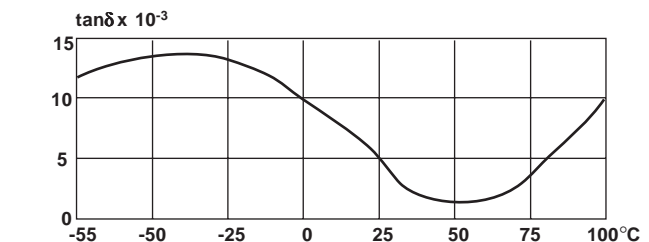
 The **rated voltage** is expressed with letter codes:  
 50VDC (Z), 63VDC (C), 100VDC (D), 250VDC (H),  
 400VDC (K)

 The capacitors **type** codes are as follows: MKT 1804(M)

 The **manufacturing year** and the **testing month** are  
 expressed according to IEC 60062.

**TYPICAL PARAMETERS**


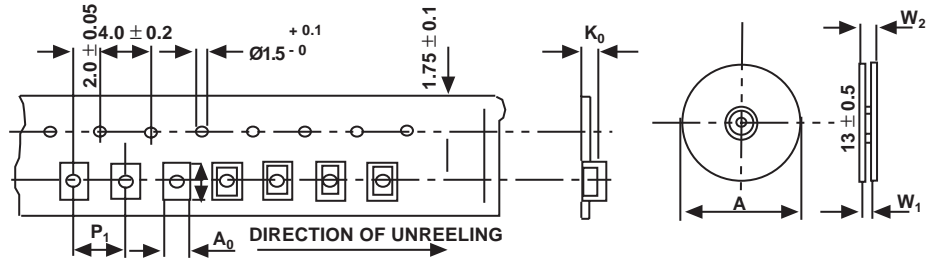
CAPACITANCE VERSUS TEMPERATURE AT 1kHz



DISSIPATION FACTOR VERSUS TEMPERATURE 1kHz

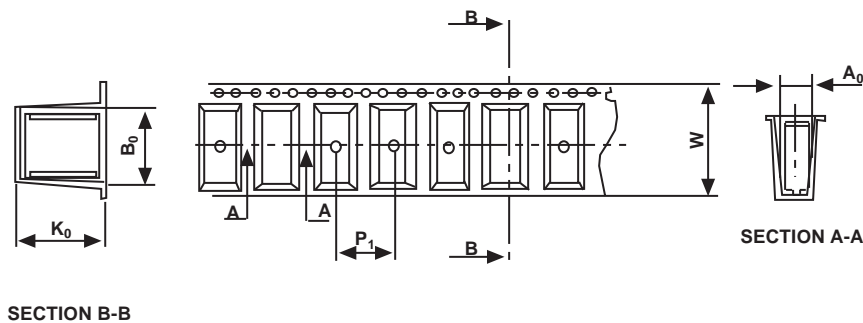
**TAPE PACKAGING OF SMD CAPACITORS**

Standard taping:



EIA SIZE CODE	SIZE OF CAPACITOR			TAPING DIMENSIONS								
	L	W	H	W + 0.3	P <sub>1</sub> ± 0.1	A <sub>0</sub>	B <sub>0</sub>	K <sub>0</sub>	A ± 2.0	W <sub>1</sub> + 2	W <sub>2</sub> MAX	QTY/PCS
2220	5.7	5.0	2.5	12.0	8.0	5.5	6.0	2.8	330	12.4	22.0	3100
2220	5.7	5.0	3.0	12.0	8.0	5.5	6.0	3.3	330	12.4	22.0	2400
2220	5.7	5.0	4.0	12.0	8.0	5.5	6.0	4.3	330	12.4	22.0	2100
2824	7.3	6.0	2.5	12.0	8.0	6.5	7.5	2.8	330	12.4	22.0	3100
2824	7.3	6.0	3.0	12.0	8.0	6.5	7.5	3.3	330	12.4	22.0	2500
2824	7.3	6.0	3.5	12.0	8.0	6.5	7.5	3.8	330	12.4	22.0	2300
2824	7.3	6.0	4.5	12.0	8.0	6.5	7.5	4.8	330	12.4	22.0	1700
4036	10.2	9.1	5.5	16.0	16.0	9.5	10.5	5.8	330	16.4	22.0	800
5045	12.7	11.5	6.5	24.0	16.0	11.9	13.1	6.8	330	24.4	30.0	600
6560	16.5	15.0	7.0	24.0	20.0	15.4	16.8	7.3	330	21.4	30.0	500

Vertical taping (optional):



EIA SIZE CODE	SIZE OF CAPACITOR			TAPING DIMENSIONS								
	L	W	H	W + 0.3	P <sub>1</sub> ± 0.1	A <sub>0</sub>	B <sub>0</sub>	K <sub>0</sub>	A ± 2.0	W <sub>1</sub> + 2	W <sub>2</sub> MAX	QTY/PCS
4022	10.2	9.1	5.5	24.0	16.0	6.0	10.5	9.3	330	24.5	30.0	500
5026	12.7	11.5	6.5	24.0	16.0	6.9	13.1	11.8	330	24.5	30.0	400
6528	16.5	15.0	7.0	44.0	20.0	7.5	17.0	15.3	330	44.5	49.5	250