SERIES MKT 1826
Film Capacitors
Metallized Polyester

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FEATURES

- Quality assessment: CECC 30 401-058
  Related document: DIN 44 122
- Stacked film construction
- Small size
- Widest range of C-values
- Auto insertable

APPLICATIONS

Blocking, bypassing, filtering and timing, high frequency coupling and decoupling for fast digital and analog ICs, interference suppression in low voltage applications.

SPECIFICATIONS

Temperature Range: - 55°C to + 100°C.

Capacitance Range: 1000pF to 3.3µF.

Capacitance Tolerance: ± 20% (M), ± 10% (K), ± 5% (J).

Rated Voltages: (U_R) 50 VDC, 63 VDC, 100 VDC.

Permissable AC Voltages (RMS) Up To 60 Hz: 30 VAC, 40 VAC, 63 VAC.

Test Voltage (electrode/electrode): 1.6 x U_R for 2 s.

Insulation Resistance: Measured at 100 VDC (50 VDC and 63 VDC series measured at 50 VDC) after one minute.

For C ≤ 0.33µF: 15,000 Megohm minimum value. 100,000 Megohm typical value.

Time Constant: Measured at 100 VDC (50 VDC and 63 VDC series measured at 50 VDC) after one minute.

For C > 0.33µF: 5,000 s minimum value. 15,000 s typical value.

Temperature Coefficient: Refer to graphs in General Information.

Capacitance Drift: Up to + 40°C, ± 1.5% for a period of two years.

Derating For DC and AC Category Voltage U_C: At + 85°C, U_C = 1.0 U_R. At + 100°C, U_C = 0.8 U_R.

Storage Temperature: - 60°C to + 100°C.

Self Inductance: ~ 6 nH measured with .079" [2.0mm] long leads.

Pull Test On Leads: ≥ 30 N in direction of leads according to IEC publication 68-2-21.

Solder Conditions: Refer to General Information.

Suitable Cleaning Solvents: Refer to General Information.

Dielectric: Polyester film.

Electrodes: Vacuum deposited aluminum.

Coating: Flame retardant plastic case (UL Class 94 V-0), green, epoxy resin sealed.

Construction: Stacked metallized film (refer to General Information).

Leads: Tinned wire.

IEC Test Classification: 55/100/56 according to IEC Publication 68.

Taping: Refer to General Information.

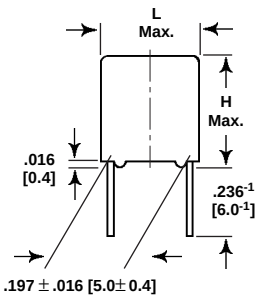
Marking: Manufacturer's logo, type, C-value, rated voltage, tolerance, date of manufacture.

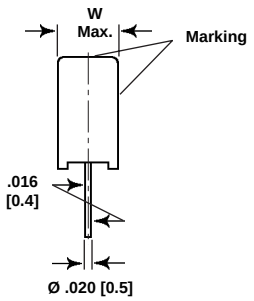
MAXIMUM PULSE RISE TIME d_v/d_t [V/µs]			
PCM	**50 VDC**	**63VDC**	**100 VDC**
.197 [5.0]	80	100	120

If the maximum pulse voltage is less than the rated voltage higher d_v/d_t values can be permitted. Refer to General Information for additional pulse load information.

DISSIPATION FACTOR TAN δ (MAXIMUM VALUES)			
MEASURED AT	**C ≤ 0.1µF**	**0.1µF < C ≤ 1.0µF**	**C > 1.0µF**
1kHz	8×10^{-3}	8×10^{-3}	10×10^{-3}
10kHz	15×10^{-3}	15×10^{-3}	—
100kHz	30×10^{-3}	—	—

DIMENSIONAL CONFIGURATIONS **[Numbers in brackets indicate millimeters]**



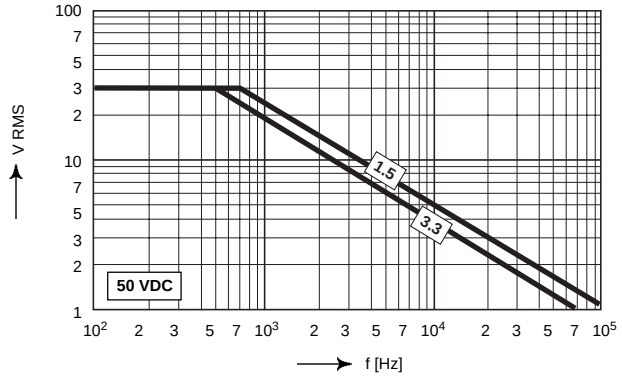


CAPACITANCE	CAPACITANCE CODE	VOLTAGE CODE 05 50 VDC/ 30 VAC			VOLTAGE CODE 06 63 VDC/ 40 VAC			VOLTAGE CODE 01 100 VDC/ 63VAC		
		W	H	L	W	H	L	W	H	L
1000pF	- 210	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
1500pF	- 215	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
2200pF	- 222	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
3300pF	- 233	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
4700pF	- 247	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
6800pF	- 268	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
0.01µF	- 310	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
0.015µF	- 315	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
0.022µF	- 322	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
0.033µF	- 333	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
0.047µF	- 347	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
0.068µF	- 368	—	—	—	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]
0.1µF	- 410	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]	.098 [2.5]	.256 [6.5]	.283 [7.2]
0.15µF	- 415	—	—	—	.098 [2.5]	.256 [6.5]	.283 [7.2]	.118 [3.0]	.295 [7.5]	.283 [7.2]
0.22µF	- 422	—	—	—	.118 [3.0]	.295 [7.5]	.283 [7.2]	.138 [3.5]	.335 [8.5]	.283 [7.2]
0.33µF	- 433	—	—	—	.138 [3.5]	.335 [8.5]	.283 [7.2]	.178 [4.5]	.374 [9.5]	.283 [7.2]
0.47µF	- 447	—	—	—	.138 [3.5]	.335 [8.5]	.283 [7.2]	.178 [4.5]	.374 [9.5]	.283 [7.2]
0.68µF	- 468	—	—	—	.178 [4.5]	.374 [9.5]	.283 [7.2]	.217 [5.5]	.453 [11.5]	.283 [7.2]
1.0µF	- 510	—	—	—	.197 [5.0]	.413 [10.5]	.283 [7.2]	.283 [7.2]	.512 [13.0]	.283 [7.2]
1.5µF	- 515	.217 [5.5]	.453 [11.5]	.283 [7.2]	—	—	—	—	—	—
2.2µF	- 522	.283 [7.2]	.512 [13.0]	.283 [7.2]	—	—	—	—	—	—
3.3µF	- 533	.283 [7.2]	.512 [13.0]	.283 [7.2]	—	—	—	—	—	—

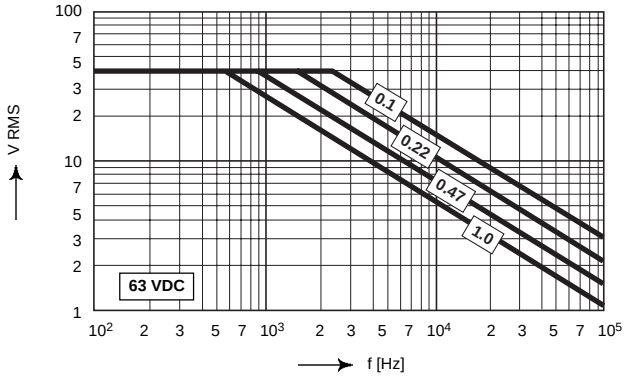
Further C-values upon request.

TYPICAL PARAMETERS

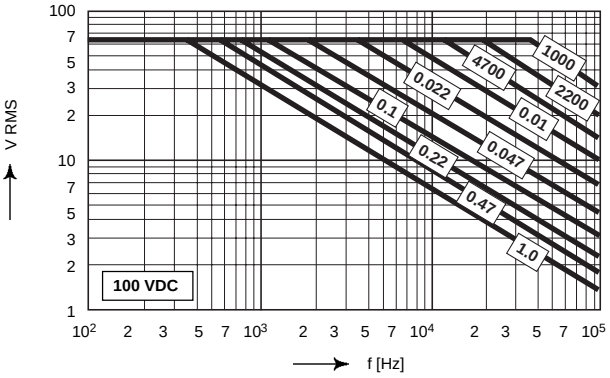
Permissible AC voltage versus frequency
(Capacitance in µF)



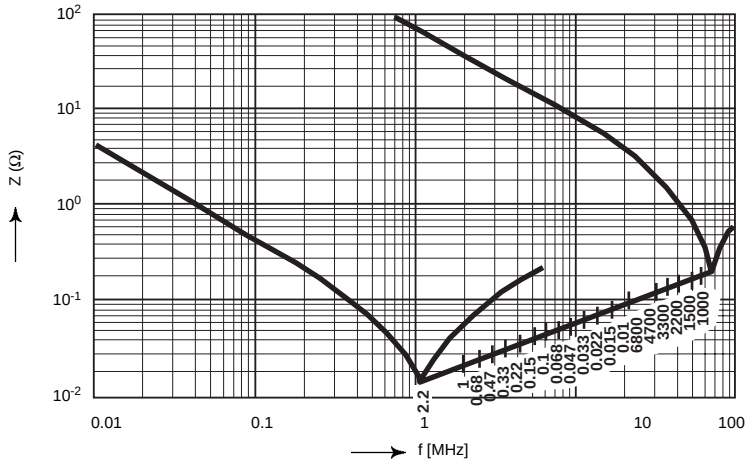
Permissible AC voltage versus frequency
(Capacitance in µF)



Permissible AC voltage versus frequency
(Capacitance in µF and pF)



Impedance versus frequency Z = (f) (Lead length .079" [2.0mm])



HOW TO ORDER

MKT 1826	510	06	5
MODEL	RATED CAPACITANCE	RATED VOLTAGE	CAPACITANCE TOLERANCE
	C = 1µF	U_R = 63 VDC	± 10%