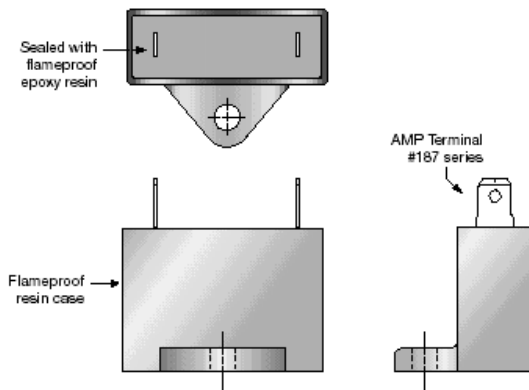


[1] Features

- ① Self-healing property avoiding short circuit.
- ② Low loss.
- ③ High operating temperature.
- ④ Dry technology no leakage risk.
- ⑤ The plastic case eliminates any risk of dents or corrosion, no need for grounding.

[2] Typical applications

- ① Single phase AC induction (Small fractional horse power, washing machine, water pump) motor run.
- ② Fluorescent ballast efficiency
- ③ General 50/60Hz application, but not be used at higher frequency or in applications higher frequency harmonics are present.

[3] Construction


① **Winding** : non-inductively wound self-healing metallized polypropylene film.

② **Style** : The winding is sealed in a rectangular thermo-plastic box with epoxy fill. The box and the epoxy are flame proof, self-extinguishing (UL 94V).

③ **Terminal** : AMP187, AMP250, insulated or un-insulated lead wire available with or without mounting tab. AMP187 terminal style A with mounting tab standard.

[4] Specifications
[1] General data

Applicable standard	IEC60252, JIS C4908	
Rated voltage (URAC)	250VAC, 300VAC, 350VAC, 400VAC, 450VAC	
Capacitance range	0.5uF ~ 30.0uF	
Capacitance tolerance	+10% ~ -5% (U), ±10% (K), ±5% (J), ±3% (W)	
Max. permissible temperature	+85°C	
Min. ambient temperature	-25°C	
Life expectancy	40D (40,000h)	

[2] Electrical data

AC withstand voltage	between terminals	1.75URAC for 10sec.
	the collected terminals and case	2,000 VAC for 60sec.
Dissipation factor (DF)	0.20% max. at 20°C, 50/60hz, URAC	
Rated frequency	50/60hz.	
Insulation resistance	≥ 2,000MΩ at 20°C, between the collected terminals and the case. 500VDC, 1 min.	
Max. permissible voltage	1.1 URAC	
Max. permissible current	1.3 rated current	
Max. permissible VA	1.35 rated VA	

$$* \text{rated current (A)} = 2\pi f(\text{Hz})C(\text{uF})URAC(\text{VAC}) \times 10^{-6}$$

$$* \text{rated VA (Var)} = 2\pi f(\text{Hz})C(\text{uF})URAC^2(\text{VAC}) \times 10^{-6}$$

[3] Environmental test data

Item	Test conditions	Test criteria
Damp heat test	40±3°C, R.H.: 90~95% for 500±12 hours	① Rins: ≥ 0.5 x specified value in [2] Electrical data. ② Increase in DF at 90±3°C: ≤ 0.05% ③ $\frac{C}{C_0}$: ≤ ±5% of initial value
Endurance test	85±3°C applying 1.25URAC for 800 hours	① Increase in DF at 90±3°C: ≤ 0.05% ② $\frac{C}{C_0}$: ≤ ±5% of initial value

[5] Marking

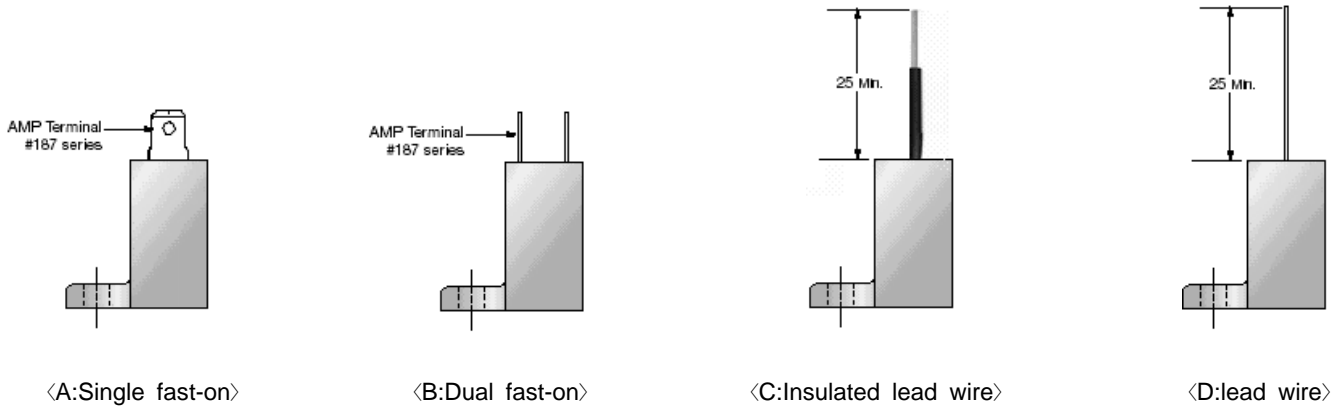
URAC, Capacitance & tolerance are marked on the capacitor.

[6]Ordering/part number information

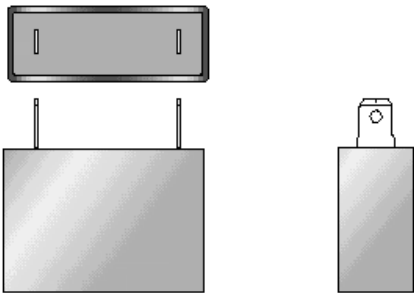
MLC	99	P0	Z	25	455	K	A	-	-	-
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

- (1)AC capacitor for electrical appliance
- (2)Shape of capacitor(rectangular,plastic box)
- (3)Safety class:without PSI
- (4)Operating temperature:-25℃~+85℃
- (5)URAC:expressed in tens of volts of AC,for example 25=250VAC
- (6)Capacitance in pF:first 2 figures indicating the pF,last figure indicating numbers of zeros to be added to the pF.
The letter D indicates ½uF for capacitors 10.5uF and above.
For example: 4,500,000pF= 4,500nF= 4.5uF=455
12,500,000pF=12,500nF=12.5uF=12D
- (7)Capacitance tolerance:±10%
- (8)Terminal style:A
- (9)internal use
- (10)internal use
- (11)No code for with mounting tab
Without mounting tab:X

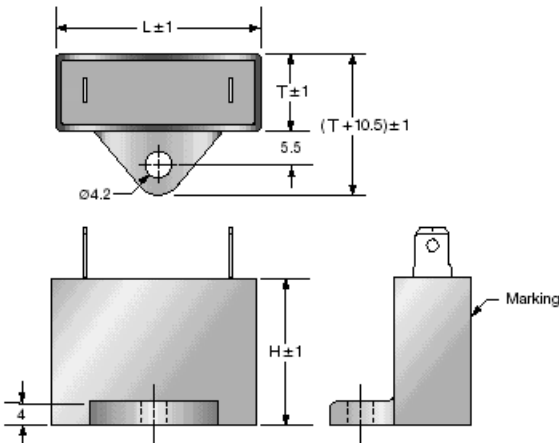
【Terminal style】



【Without mounting tab】 :add code X



[7]Dimensions in mm



URAC:250Vrms(50/60Hz)

uF	L	H	T
1.5	33.0	23.0	12.5
2.0	33.0	23.0	12.5
2.5	33.0	28.0	16.0
3.0	33.0	28.0	16.0
3.5	33.0	28.0	16.0
4.0	38.0	29.0	16.5
4.5	38.0	29.0	16.5
5.0	38.0	31.0	17.5
6.0	38.0	33.0	19.5
7.0	38.0	33.0	19.5
8.0	48.0	31.5	19.5
9.0	48.0	31.5	19.5
10.0	58.0	31.5	19.5
12.0	58.0	31.5	19.5
14.0	58.0	34.0	22.0
16.0	58.0	36.5	24.5
18.0	58.0	36.5	24.5
20.0	58.0	40.5	28.0
22.0	58.0	40.0	28.0
25.0	58.0	43.0	31.0
30.0	58.0	43.0	31.0

URAC:300Vrms(50/60Hz)

uF	L	H	T
1.0	33.0	23.0	12.5
1.5	33.0	23.0	12.5
2.0	33.0	28.0	16.0
2.5	38.0	29.0	16.5
3.0	38.0	29.0	16.5
3.5	38.0	31.0	17.5
4.0	38.0	33.0	19.5
4.5	38.0	33.0	19.5
5.0	48.0	31.5	19.5
6.0	48.0	31.5	19.5
7.0	58.0	31.5	19.5
8.0	58.0	31.5	19.5
9.0	58.0	34.0	22.0
10.0	58.0	34.0	22.0
12.0	58.0	36.5	24.5
14.0	58.0	40.0	28.0
16.0	58.0	40.0	28.0
18.0	58.0	40.0	28.0
20.0	58.0	43.0	31.0

URAC:350Vrms(50/60Hz)

uF	L	H	T
1.0	33.0	23.0	12.5
1.5	33.0	28.0	16.0
2.0	38.0	29.0	16.5
2.5	38.0	31.0	17.5
3.0	38.0	33.0	19.5
3.5	38.0	33.0	19.5
4.0	48.0	31.5	19.5
4.5	48.0	31.5	19.5
5.0	58.0	31.5	19.5
6.0	58.0	31.5	19.5
7.0	58.0	34.0	22.0
8.0	58.0	36.5	24.5
10.0	58.0	40.0	28.0
12.0	58.0	40.0	28.0
14.0	58.0	43.0	31.0
16.0	58.0	45.0	33.5

URAC:400Vrms(50/60Hz)

uF	L	H	T
1.0	33.0	28.0	16.0
1.5	38.0	29.0	16.5
2.0	38.0	33.0	19.5
2.5	38.0	33.0	19.5
3.0	48.0	31.5	19.5
3.5	58.0	31.5	19.5
4.0	58.0	31.5	19.5
4.5	58.0	34.0	22.0
5.0	58.0	34.0	22.0
6.0	58.0	36.5	24.5
7.0	58.0	40.0	28.0
8.0	58.0	40.0	28.0
10.0	58.0	43.0	31.0
12.0	58.0	45.0	33.5

URAC:450Vrms(50/60Hz)

uF	L	H	T
0.5	33.0	23.0	12.5
1.0	38.0	29.0	16.5
1.5	38.0	31.0	17.5
2.0	48.0	31.5	19.5
2.5	48.0	31.5	19.5
3.0	58.0	31.5	19.5
3.5	58.0	31.5	19.5
4.0	58.0	34.0	22.0
4.5	58.0	36.5	24.5
5.0	58.0	36.5	24.5
6.0	58.0	40.0	28.0
7.0	58.0	40.0	28.0
8.0	58.0	43.0	31.0
10.0	58.0	45.0	33.5

*For further details, refer to  [General technical information of AC film capacitors for electrical appliances](#)