

## **Plastic Film Capacitors**

## **Film Capacitor for AC Motor**

**PMF** series



#### **Features**

- High safety (safety function installed)
- High reliability, safety standard approval
- Small size, lightness, and low loss
- RoHS compliant

### **Recommended applications**

Motor and small compressor (for running)

## Construction

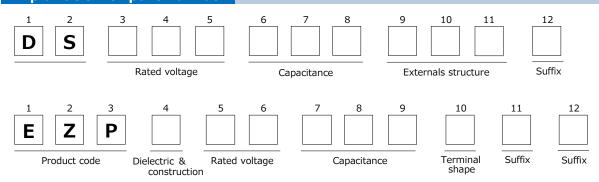
• Internal electrod: Metallized plastic film (safety function installed)

Plastic case : UL94 V-0Sealing : UL94 V-0

China

• Terminal : Faston terminal (tin plating), Lead wire (tin plating), Insulated wire

## Explanation of part number



Applicable standard	
lanan	JIS C 4908 Capacitors for electrical apparatus
Japan	CMJ registration parts. Registration No.1475- C9902-026(JET)
UL/cUL	UL810/CSA C22.2 No.190 FILE No.E76560
CSA	CSA C22.2 No.190
Europe	EN60252-1 AC motor Capacitors TUV

GB/T 3667.1 AC motor Capacitors CQC

#### **Specifications** JIS UL EN GB Applicable standard\*1 With built-in safety function Safety class S3 P2 (CMJ approval) 10000 AFC (UL) 150 V to 500 V EN / TUV: 450 V Rated voltage (50/60 Hz)\*2 [AC] (For UL Approved P/N: up to 480 V.AC) GB: 250 V, 450 V Rated capacitance \*2 $0.5 \mu F$ to $65 \mu F$ Capacitance tolerance -5% / +10%, ±5% (Refer to the individual drawing) Between terminals Rated voltage×1.75 60 s Rated voltage×2.0 60 s Withstand Between terminals voltage (min. 2000 V [AC]) Rated voltage × 2.0 + 1000 V [AC] 60 s to enclosure Maximum permissible temperature 70 ℃ (Including self temperature rising) (Case wall)

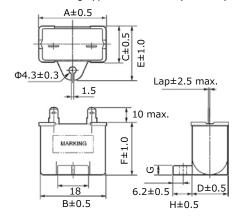
<sup>\*1 :</sup> The range of approval is different depending on each approval.

<sup>\*2 :</sup> These are typical values.

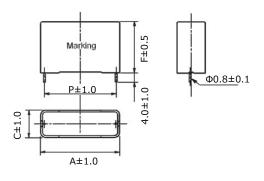
**PMF** series

## Dimension (Example)\*3

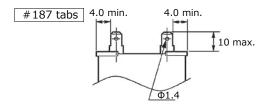
Q series (Mounting type)
 ※ Non mounting type is available. (P series).

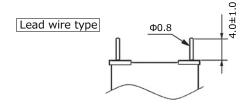


• T series (Printed circuit board (PCB))



• Terminal shape (Standard)





Unit: mm

## Rating · Dimensions\*4

## • Q series (Mounting type)

Rated voltage	Capacitance		Dimensions (mm)							Case series
(V) [AC]	(µF)	Α	В	С	D	Е	F	G	Н	Case series
	3.0 to 4.5	39.5	38.5	16.2	14.8	27.0	27.0		11.5	
	5.0 to 6.0	39.5	38.2	18.3	16.8	29.0	29.0			
	6.5 to 9.5	39.5	38.2	22.0	20.8	32.5	32.5	4.0		
250	10.0 to 16.0	49.7	48.3	24.0	22.5	34.5	34.5	4.0		
	16.5 to 20.0	50.0	48.5	26.7	25.3	37.5	38.0	_		
	20.5 to 25.0	50.0	48.5	30.5	28.8	41.0	41.5			
	25.5 to 34.5	50.0	48.5	34.0	32.6	45.0	45.0	6.0		Q
	1.0 to 1.4	39.5	38.5	16.2	14.8	27.0	27.0		11.5	Q
	1.5 to 1.8	39.5	38.2	18.3	16.8	29.0	29.0	4.0		
450	1.9 to 2.5	39.5	38.2	22.0	20.8	32.5	32.5			
	3.0 to 5.0	49.7	48.3	24.0	22.5	34.5	34.5			
	5.5 to 6.5	50.0	48.5	26.7	25.3	37.5	38.0			
	7.0 to 8.0	50.0	48.5	30.5	28.8	41.0	41.5			
	8.5 to 10.5	50.0	48.5	34.0	32.6	45.0	45.0	6.0		

## • T series (Printed circuit board (PCB))

Rated voltage	Capacitance	Dimensions (mm)							
(V) [AC]	(µF)	Α	С	F	Р	Case series			
	3.0 to 4.0	38.5	14.0	25.5	36.0				
	4.5 to 6.5	38.5	15.5	29.0	36.0				
250	7.0 to 8.0	38.5	20.5	29.0	36.0				
	8.5 to 11.0	38.5	25.0	34.0	36.0				
	11.5 to 18.5	48.5	22.0	36.0	46.0				
	1.0 to 1.3	38.5	14.0	25.5	36.0	ı			
	1.4 to 2.0	38.5	15.5	29.0	36.0				
450	2.1 to 2.5	38.5	20.5	29.0	36.0				
	3.0 to 3.5	38.5	25.0	34.0	36.0				
	4.0 to 5.5	48.5	22.0	36.0	46.0				

<sup>\*4:</sup> Please contact if necessary other Voltage and Capacitance.

<sup>\*3 :</sup> Other shape and specific requirement can be designed. Please contact, if necessary.



## **Plastic Film Capacitors**

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**SMF** series



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• Motor and small compressor (for running)

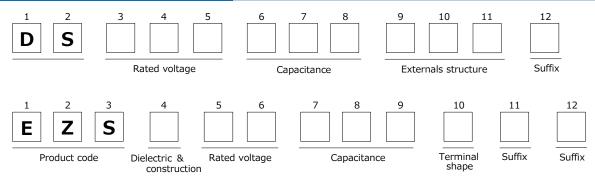
#### Construction

• Internal electrod: Metallized plastic film (safety function installed)

Plastic case : UL94 V-0Sealing : UL94 V-0

• Terminal : Faston terminal (tin plating), Lead wire (tin plating), Insulated wire

### **Explanation of part number**



Applicable standard				
lanan	JIS C 4908 Capacitors for electrical apparatus			
Japan	CMJ registration parts. Registration No.1475- C9902-026(JET)			
UL/cUL UL810 FILE No.E76560				
Europo	ENGOSES 1 AC mater Capacitors VDE			

# Europe EN60252-1 AC motor Capacitors VDE China GB/T 3667.1 AC motor Capacitors CQC Specifications

Applicable standard*1		JIS UL	EN GB			
Safety class		With built-in safety function P2 (CMJ approval) 10000 AFC (UL)	S0			
Rated volta	ge (50/60 Hz)*2 [AC]	370 V to 450 V	400 V, 450 V			
Rated capacitance*2		1.5 μF to 9 μF				
Capac	citance tolerance	$-5 \% / +10 \%$ , $\pm 5 \%$ (Refer to the individual drawing)				
Withstand	Between terminals	Rated voltage×1.75 60 s Rated voltage×2.0 60 s				
voltage  Between terminals to enclosure		(min. 2000 V [AC]) Rated voltage $\times$ 2.0 + 1000 V [AC] 60 s				
Maximum permissible temperature (Case wall)		70 ℃ (Including self temperature rising)				

<sup>\*1</sup>: The range of approval is different depending on each approval.

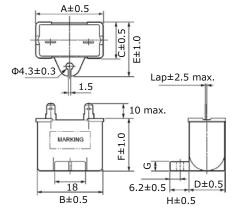
<sup>\*2 :</sup> These are typical values.

**SMF** series

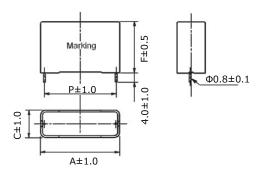
## Dimension (Example)\*3

● SQ series (Installation leg type)

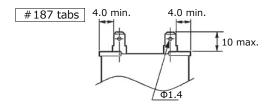
※ Non mounting type is available. (SP series).

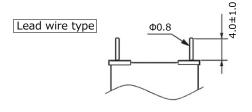


• T series (Printed circuit board (PCB))



• Terminal shape (Standard)





Unit: mm

## Rating · Dimensions\*4

SQ series (Installation leg type)

Rated voltage	Capacitance		Dimensions (mm)							Casa sarias
(V) [AC]	(µF)	Α	В	С	D	Е	F	G	Н	Case series
	1.5 to 3.0	39.5	38.0	16.0	14.5	26.5	30.5			
	3.5	39.5	38.0	17.5	16.0	28.0	30.5			
400	4.0 to 5.0	39.5	38.0	22.0	20.5	32.5	30.5	4.0	11.0	
400	5.5 to 6.5	39.5	38.0	26.7	25.2	37.0	32.0			
	7.0 to 8.0	39.5	38.0	26.7	25.2	37.0	37.0			
	8.5 to 9.0	39.5	38.0	26.7	25.2	37.0	41.0			50
	1.5 to 2.5	39.5	38.0	16.0	14.5	26.5	30.5	4.0		SQ SQ
	3.0	39.5	38.0	17.5	16.0	28.0	30.5		11.0	
450	3.5 to 4.0	39.5	38.0	22.0	20.5	32.5	30.5			
	4.5 to 5.5	39.5	38.0	26.7	25.2	37.0	32.0			
	6.0 to 6.5	39.5	38.0	26.7	25.2	37.0	37.0			
	7.0 to 7.5	39.5	38.0	26.7	25.2	37.0	41.0			

## • T series (Printed circuit board (PCB))

Rated voltage	Capacitance	Dimensions (mm)							
(V) [AC]	(µF)	Α	С	F	Р	Case series			
	1.5 to 2.5	38.5	14.0	25.5	36.0				
400	3.0 to 3.5	38.5	15.5	29.0	36.0				
400	4.0 to 5.0	38.5	20.5	29.0	36.0				
	5.5 to 7.5	38.5	25.0	34.0	36.0	т			
450	1.5 to 2.0	38.5	14.0	25.5	36.0	]			
	2.5 to 3.0	38.5	15.5	29.0	36.0				
	3.5 to 4.0	38.5	20.5	29.0	36.0				
	4.5 to 6.5	38.5	25.0	34.0	36.0				

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