

### Power Miniaturized General Purpose Snap-In



#### KEY BENEFITS

- Temperature range: - 25 °C to + 85 °C
- Useful life: 2000 hours at 85 °C
- Case sizes: 22 mm x 25 mm to 35 mm x 50 mm
- Capacitance rating: 68 μF to 2200 μF (tolerance ± 20 %)
- Voltage ratings: 200 V to 450 V
- Polarized aluminum electrolytic capacitors, non-solid electrolyte
- Large types, miniaturized dimensions, cylindrical aluminum case insulated with a blue sleeve

#### APPLICATIONS

- Digital TV receiver power supply
- Consumer welding equipment
- Uninterruptible power supply (UPS)
- Air-conditioning motor control
- Washing machine motor control
- Refrigerator compressor motor control

#### RESOURCES

- Datasheet: 093 PMG-SI - <http://www.vishay.com/doc?28383>
- For technical questions contact [aluminumcaps2@vishay.com](mailto:aluminumcaps2@vishay.com)
- Material categorization: For definitions of compliance please see <http://www.vishay.com/doc?99912>



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# ALUMINUM ELECTROLYTIC CAPACITOR

## 093 PMG-SI

### Power Miniaturized General Purpose Snap-In

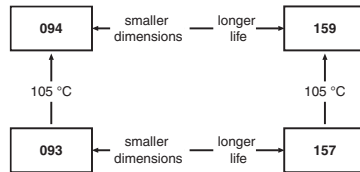


#### MARKING

The capacitors are marked (where possible) with the following information:

- Rated capacitance (in  $\mu\text{F}$ )
- Tolerance on rated capacitance, code letter in accordance with IEC 60062 (M for  $\pm 20\%$ )
- Rated voltage (in V)
- Date code
- Name of manufacturer
- “-” sign to identify the negative terminal, visible from the top and side of the capacitor
- Code number (last 8 digits)
- Maximum operating temperature

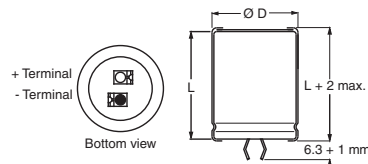
QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case size ( $\varnothing D \times L$ in mm)	22 x 25 to 35 x 50
Rated capacitance range, $C_R$	68 $\mu\text{F}$ to 2200 $\mu\text{F}$
Tolerance on $C_R$	$\pm 20\%$
Rated voltage range, $U_R$	200 V to 450 V
Category temperature range	-25 °C to +85 °C
Useful life at 85 °C	2000 h
Useful life at 40 °C and 1.4 x $I_R$ applied	36 000 h
Shelf life at 0 V, 85 °C	500 h
Based on sectional specification	IEC 60384-4/EN130300/W of JISC5141



SELECTION CHART FOR $C_R$ , $U_R$ AND RELEVANT NOMINAL CASE SIZES ( $\varnothing D \times L$ in mm)					
$C_R$ ( $\mu\text{F}$ )	$U_R$ (V)				
	200	250	400	420	450
68	-	-	22 x 25	-	-
82	-	-	-	-	22 x 25
100	-	-	22 x 25	22 x 25	22 x 30
120	-	-	-	-	22 x 30 25 x 25
150	-	-	22 x 30 25 x 25	-	22 x 35
180	-	-	22 x 35 25 x 30	22 x 35 25 x 30	22 x 40 25 x 30 30 x 25
220	-	22 x 25	22 x 40 25 x 30 30 x 25	25 x 35 30 x 25	22 x 50 25 x 35 30 x 25
270	22 x 25	22 x 30	22 x 50 30 x 25	22 x 50 30 x 30	30 x 30 35 x 25
330	-	22 x 35	25 x 40 30 x 30 35 x 25	25 x 50 30 x 35	25 x 50 35 x 30
390	22 x 30 25 x 25	22 x 35 25 x 30	25 x 50 30 x 35 35 x 30	35 x 30	30 x 40 35 x 35
470	22 x 35	25 x 35	30 x 40 35 x 30	35 x 35	35 x 40
560	25 x 30	25 x 40	30 x 45 35 x 35	30 x 50 35 x 40	35 x 45
680	25 x 35	30 x 30	35 x 40	35 x 45	35 x 50
820	25 x 40	30 x 35	35 x 50	-	-
1000	30 x 35	30 x 40	-	-	-
1200	30 x 40	35 x 40	-	-	-
1500	30 x 45	35 x 45	-	-	-
1800	30 x 50 35 x 40	35 x 50	-	-	-
2200	35 x 45	-	-	-	-

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#### DIMENSIONS in millimeters AND AVAILABLE FORMS



The minus and/or plus terminal can be marked with an imprinted sign  
Fig. 2 - Two terminal snap-in

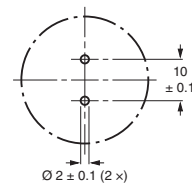


Fig. 3 - Mounting hole diagram

Please see Table 1 on page 2 of datasheet for full dimensional data and packaging quantities: <http://www.vishay.com/doc?28383>