

## 153 CRV SMD Aluminum Capacitor



### KEY BENEFITS

- Polarized aluminum electrolytic capacitors, non-solid electrolyte, self healing
- SMD-version with base plate, vertical construction requiring minimum board space
- Voltage ratings up to 100 V
- Capacitance up to 1000  $\mu$ F
- Long useful life: 2000 to 3000 hours at 105 °C
- High CV per unit volume
- Charge and discharge proof, no peak current limitation
- Supplied in blister tape on reel

### APPLICATIONS

- SMD technology, in compliance with RoHS
- Coupling, decoupling, smoothing, filtering, buffering, timing
- Telecommunications, general industrial, EDP, automotive, portable and lightweight equipment

### RESOURCES

- Datasheet: 153 CRV SMD <http://www.vishay.com/doc?28388>
- For technical questions contact [aluminumcaps1@vishay.com](mailto:aluminumcaps1@vishay.com)
- Material categorization: For definitions of compliance please see <http://www.vishay.com/doc?99912>

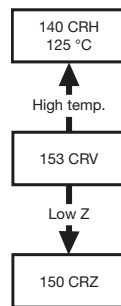


RoHS  
COMPLIANT

One of the World's Largest Manufacturers of  
Discrete Semiconductors and Passive Components



### 153 CRV SMD Aluminum Capacitor



#### MARKING

- Rated capacitance (in  $\mu\text{F}$ )
- Rated voltage (in V)
- Date code
- Black mark or “-” sign indicating the cathode (the anode is identified by bevelled edges)

#### PACKAGING

Supplied in blister tape on reel

QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Nominal case sizes (L x W x H in mm)	4.0 x 4.0 x 5.3 to 10 x 10 x 14
Rated capacitance range, $C_R$	0.47 $\mu\text{F}$ to 1000 $\mu\text{F}$
Tolerance on $C_R$	$\pm 20\%$
Rated voltage range, $U_R$	6.3 V to 100 V
Category temperature range	-55 °C to +105 °C
Endurance test at 105 °C:	
Case sizes 4.0 x 4.0 x 5.3 to 6.3 x 6.3 x 5.3	1000 h
Case sizes 8.0 x 8.0 x 6.5 to 10 x 10 x 14	2000 h
Useful life at 105 °C:	
Case sizes 4.0 x 4.0 x 5.3 to 6.3 x 6.3 x 5.3	2000 h
Case sizes 8.0 x 8.0 x 6.5 to 10 x 10 x 14	3000 h
Useful life at 40 °C; 1.3 x $I_R$ applied:	
Case sizes 4.0 x 4.0 x 5.3 to 6.3 x 6.3 x 5.3	200 000 h
Case sizes 8.0 x 8.0 x 6.5 to 10 x 10 x 14	300 000 h
Shelf life at 0 V, 105 °C	1000 h
Based on sectional specification	IEC 60384-18/ CECC 32300
Climatic category IEC 60068	55/105/56

SELECTION CHART FOR $C_R$ , $U_R$ , AND RELEVANT NOMINAL CASE SIZES (L x W x H in mm)								
$C_R$ ( $\mu\text{F}$ )	$U_R$ (V)							
	6.3	10	16	25	35	50	63	100
0.47	-	-	-	-	-	4.0 x 4.0 x 5.3	-	-
1.0	-	-	-	-	-	4.0 x 4.0 x 5.3	-	-
2.2	-	-	-	-	-	4.0 x 4.0 x 5.3	-	-
3.3	-	-	-	-	-	4.0 x 4.0 x 5.3	-	-
4.7	-	-	-	-	4.0 x 4.0 x 5.3	5.0 x 5.0 x 5.3	-	-
10	-	-	4.0 x 4.0 x 5.3	-	5.0 x 5.0 x 5.3	6.3 x 6.3 x 5.3	-	-
22	4.0 x 4.0 x 5.3	-	5.0 x 5.0 x 5.3	-	6.3 x 6.3 x 5.3	8.0 x 8.0 x 6.5	-	-
33	-	5.0 x 5.0 x 5.3	-	6.3 x 6.3 x 5.3	8.0 x 8.0 x 6.5	8.0 x 8.0 x 10	-	10 x 10 x 14
47	5.0 x 5.0 x 5.3	-	6.3 x 6.3 x 5.3	8.0 x 8.0 x 6.5	-	8.0 x 8.0 x 10	-	-
100	6.3 x 6.3 x 5.3	-	8.0 x 8.0 x 6.5	8.0 x 8.0 x 10	-	10 x 10 x 10	10 x 10 x 14	-
220	-	-	-	-	-	-	-	-
330	8.0 x 8.0 x 10	10 x 10 x 10	-	10 x 10 x 14	-	-	-	-
470	10 x 10 x 10	-	10 x 10 x 14	-	-	-	-	-
680	-	10 x 10 x 14	-	-	-	-	-	-
1000	10 x 10 x 14	-	-	-	-	-	-	-

Revision 26-Sep-11

Capacitors - SMD Aluminum, 105 °C, Standard