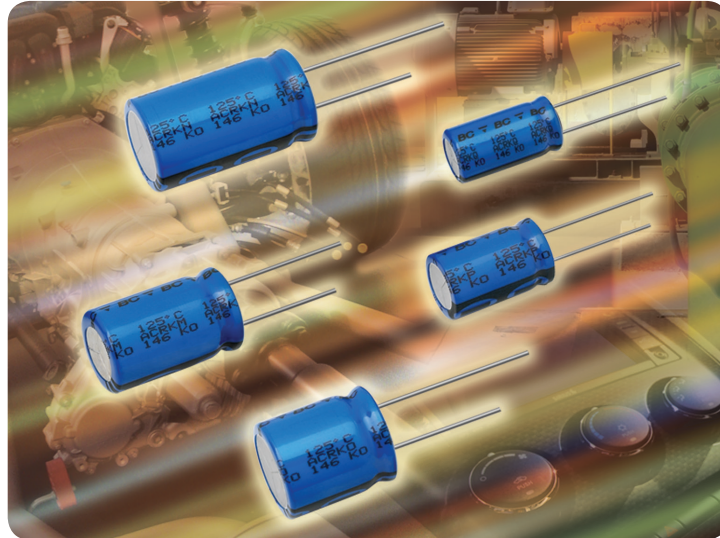


ALUMINUM ELECTROLYTIC CAPACITORS

246 RTI-V

246 RTI-V Radial Aluminum Electrolytic Capacitors with Low Impedance, High Vibration Capacity



KEY BENEFITS

- Very long useful life: 4000 h to 6000 h at 125 °C, with high stability, high reliability
- Very low impedance down to 0.018 Ω (at 20 °C, 100 kHz)
- Excellent ripple current capability
- AEC-Q200 qualified
- Vibration proof up to 50 g

APPLICATIONS

- Electronic circuits in automotive, industrial, and SMPS products
- Filtering of unwanted noise
- DC voltage smoothing
- Energy buffering
- Decoupling of super-imposed AC ripple

Automotive:

- Electro-hydraulic power steering (EHPS)
- Electric power steering (EPS)
- Engine control
- Electric brake (EPB)
- Variable speed ventilation (HVAC)
- Power management and conversion

Industrial

- Variable speed motor control
- Drives
- SMPS operating in harsh environments
- Variable speed pumps

RESOURCES

- Datasheet: 246 RTI-V - www.vishay.com/doc?28422
- For technical questions contact aluminumcaps1@vishay.com
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



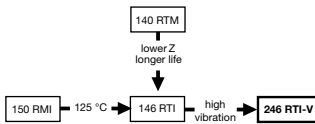
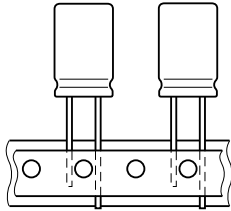
RoHS
COMPLIANT



ALUMINUM ELECTROLYTIC CAPACITORS

246 RTI-V

246 RTI-V Radial Aluminum Electrolytic Capacitors with Low Impedance, High Vibration Capacity



MARKING

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

- Rated capacitance (in μF)
- Tolerance on rated capacitance, code letter in accordance with IEC 60062 (M for $\pm 20\%$)
- Rated voltage (in V)
- Date code, in accordance with IEC 60062
- Code indicating factory of origin
- Logo of manufacturer
- Upper category temperature (125 °C)
- Negative terminal identification
- Series number (246)

QUICK REFERENCE DATA

DESCRIPTION	VALUE
Nominal case sizes (\varnothing D x L in mm)	16 x 20 to 18 x 35
Rated capacitance range, C_R	390 μF to 6800 μF
Tolerance on C_R	$\pm 20\%$
Rated voltage range, U_R	16 V to 63 V
Category temperature range	-55 °C to +125 °C
Endurance test at 125 °C	3000 h to 5000 h
Useful life at 125 °C	4000 h to 6000 h
Useful life at 40 °C, 1.8 x I_R applied	400 000 h
Shelf life at 0 V, 125 °C	1000 h
Based on sectional specification	IEC 60384-4 / EN130300
Climatic category IEC 60068	55 / 125 / 56

SELECTION CHART FOR C_R , U_R , AND RELEVANT NOMINAL CASE SIZES (\varnothing D x L in mm)

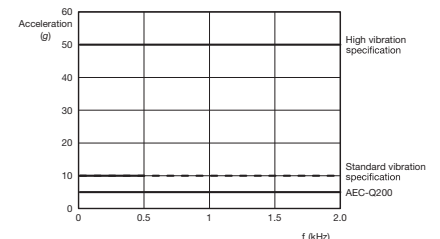
C_R (μF)	U_R (V)				
	16	25	35	50	63
390	-	-	-	-	16 x 20
470	-	-	-	-	18 x 20
560	-	-	-	-	16 x 25
680	-	-	-	-	18 x 25
	-	-	-	-	16 x 31
820	-	-	-	16 x 20	16 x 35
1000	-	-	-	18 x 20	18 x 31
	-	-	-	16 x 25	-
1200	-	-	16 x 20	18 x 25	18 x 35
	-	-	-	16 x 31	-
1500	-	-	18 x 20	16 x 35	-
1800	-	16 x 20	16 x 25	18 x 31	-
2200	-	-	18 x 25	18 x 35	-
	-	-	16 x 31	-	-
2700	16 x 20	18 x 20	16 x 35	-	-
	-	16 x 25	18 x 31	-	-
3300	18 x 20	16 x 31	18 x 35	-	-
3900	16 x 25	18 x 25	-	-	-

ENDURANCE TEST DURATION AND USEFUL LIFE AS A FUNCTION OF CASE SIZE

NOMINAL CASE SIZE \varnothing D x L (mm)	CASE CODE	ENDURANCE AT 125 °C (h)	USEFUL LIFE AT 125 °C (h)
16 x 20	19a	3000	4000
16 x 25	19	3000	5000
16 x 31	20	4000	6000
16 x 35	21	5000	6000
18 x 20	1820	3000	4000
18 x 25	1825	3000	5000
18 x 31	1831	4000	6000
18 x 35	22	5000	6000

EXTENDED VIBRATION SPECIFICATIONS

PARAMETER	PROCEDURE	REQUIREMENTS
Vibration specifications	From 10 g to 50 g	No visible damage; no leakage of electrolyte; marking legible $\Delta C/C$: $\pm 5\%$ with respect to initial measurements
Vibration frequency range	10 Hz to 2 kHz	
Vibration profile	<ul style="list-style-type: none"> • Constant sinus sweep • 3 directions • 8 h per direction 	



Revision 02-Nov-15