



- High Temperature Applications
  - > Special Feature on 142 RHS and NRWY
- AEC-Q200 Standard
  - Vishay Capabilities radial and SMD



We are offering the following manufacturers:



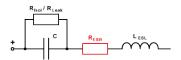




"electrolytics"

"Electrolytics" or —
offically called
electrolytic capacitors
are special capacitor
types which use an ionic
conducting liquid as one
of their plates. They are
especially interesting
when it comes to high
specific capacities.

Equivalent Circuit:



Circuit Diagram:



Electrolytic Capacitors are majorly used in relatively high-current and low-frequency electrical circuits. They can be found in power supply filters, DC/DC couplers, energy storage etc.





# RADIAL ALUMINIUM CAPACITORS

The featured series 142RHS and NRWY are both radial aluminium capacitors capable for high temperature operation from -55°C to 105°C. As the trend for mobile solutions is rising throughout the entire industry smaller components are getting more and more an industries standard. Both features series are available in reduced case sizes and therefore fully compliant to this trend. Still high voltage ratings up to 450V and high capacitance values of up to 22.000  $\mu\text{F}$  are available.



These characteristics make them suitable for different applications such as filtering, voltage decoupling applications in SMPS, buffering, DC/DC power supplies and mobile electronics.

# Featured Series: 142RHS (Vishay) and NRWY (NIC)

Characteristic	142 RHS	NRWY
Manufacturer	VISHAY.	NIC Components Corp.
Case Size (mm)	5x11 18x40	5x11 18x40
Capacity Range <sup>1</sup>	1μF 22.000μF	0.1uF 22.000uF
Temperature Range	-40°C 105°C	-55°C 105°C <sup>2</sup>
Tolerance	20%	20%
Voltage Range	10V 450V	6.3V 450V <sup>3</sup>
Endurance Test @ 105°C	2000h	up to 3000h <sup>4</sup>
Lead Options	straight/formed	straight/formed
Datasheet	<u>142 RH</u>	NRWY
Similar Series	High Temp. 146 RTI Longer Life  Lower Z 150 RMI	NRWA Longer CV
	Higher Temp.  140 RTM  Lower Z  146 RTI	NRWY Low Profile NRE-HS

<sup>&</sup>lt;sup>1</sup> Depending on Case Size and rated Voltage

<sup>&</sup>lt;sup>2</sup> Depending on rated Voltage

<sup>&</sup>lt;sup>3</sup> Depending on Capacity Requirements

<sup>&</sup>lt;sup>4</sup> Depending in Case Diameter





# **AEC-Q 200 STANDARDS**

Selected Aluminium Capacitor Series are available with AEC-Q200 qualification. Those capacitors offer a stable and reliable performance as it is required in the demanding market. They will find their use both in automotive as well as industrial markets. The parts are available in SMD and also in radial packages.

Especially security-relevant applications require the very best performance of each component used within.

AEC-Q200 tests like flame retardance tests, beam load tests or shear stress test – just to name a few – ensure that

## **AEC-Q200**

AEC-Q200 describes a stress test qualification for passive components. Originally established for the automotive industry only, it has now become an industry standard wherever reliable high quality electronic components are needed.

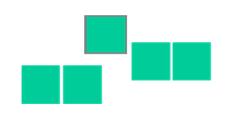
those components offer the best reliability and stable performance over the complete life cycle. Therefore AEC-Q200 qualified parts may be used for electro-hydraulic-power-steering, SMPS, variable speed ventilation, electric brake as well as engine control.



<b>140 CRH</b> high temperature, Pb-free reflow solderable	<b>140 RTM</b> long life 2500-4000h @125°C, miniature case sizes available
<b>150 SRZ</b> low impedance, very high ripple current, lead Pb-free reflow solderable	<b>146 RTI</b> low impedance, high ripple current @ High Temperature
	<b>150 RMI</b> radial miniature, high stability, high reliability, 4000-10000h @105°C

In addition to the Vishay qualified Aluminium Capacitors we are also able to offer NIC Capacitors produced on a TS-16949 certified production side.





# We find Solutions

**Passive Components** 

Service

Logistics



## **CONTACT**

wts// electronic components GmbH Fon: +49 (0) 5130 / 5845-0 Fax: +49 (0) 5130 / 375055 info@wts-electronic.de www.wts-electronic.de

We are looking forward to hear from you!

