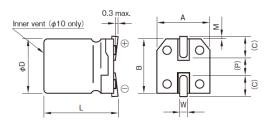
# **Spec Sheet**

Conductive Polymer Hybrid Aluminum Electrolytic Capacitors[HVX] for Automotive Powertrain and Safety

# RAHVX221M1TEH0002 (Previous PN: HVX-25V221MG10Q-R2)



( ): Reference size

#### Features

- Item Summary
  220uF±20%, 25V, φ8x10mm, SMD
- Lifecycle Stage
  Mass Production (Preferred)
- AEC-Q200 qualified
- Standard packaging quantity (minimum)
  Embossed taping 500 pcs

## Products characteristics table

Operating Temp. Range	-55 to +135 ℃
Rated Voltage	25 V
Rated Capacitance	220 uF
Tolerance at rated capacitance	± 20 %
Leakage current (max)	55 uA at 2 min
Tangent of loss angle (tan $\delta$ ) (max)	0.14
ESR (max)	22 mΩ at 100kHz / 20 ℃
Rated Ripple (max)	1600 mArms at 100kHz / 135 ℃
Impedance ratio[-25°C/+20°C]	1.5
Impedance ratio[-55℃/+20℃]	2
Endurance (Applied ripple current)[Test time]	4000 hours at 135 ℃
Endurance[Leakage current]	The initial specified value or less
Endurance[Capacitance change]	Within ±30% of initial value
Endurance[tan $\delta$ change]	200% or less of the initial specified value
Endurance[ESR change]	200% or less of the initial specified value
Shelf lifeTest time	1000 hours at 135°C; Other items are same as the endurance. How ever, the performance shall be after voltage application treatment (JIS C5101-4).
RoHS Compliance (10 subst.)	Yes
REACH Compliance (250 subst.)	Yes
Soldering	Reflow

## External Dimensions

Dimension $\phi D$	φ8 ±0.5 mm
Dimension L	10 ±0.5 mm
Dimension A	8.4 ±0.2 mm
Dimension B	8.4 ±0.2 mm
Dimension (C)	3 mm
Dimension (P)	3.1 mm
Dimension W	0.7 to 1.1 mm
Dimension M	0.4 ±0.3 mm

2025.10.27

The data is reference only. Electrical characteristics vary depending on environment or measurement condition. TAIYO YUDEN reserves the right to make change to the Data at any time without notice. Before making final selection, please check product specification.