

# ENSURING RELIABILITY HIGH-VOLTAGE REED RELAYS THROUGH CUSTOMIZATION AND RIGOROUS TESTING

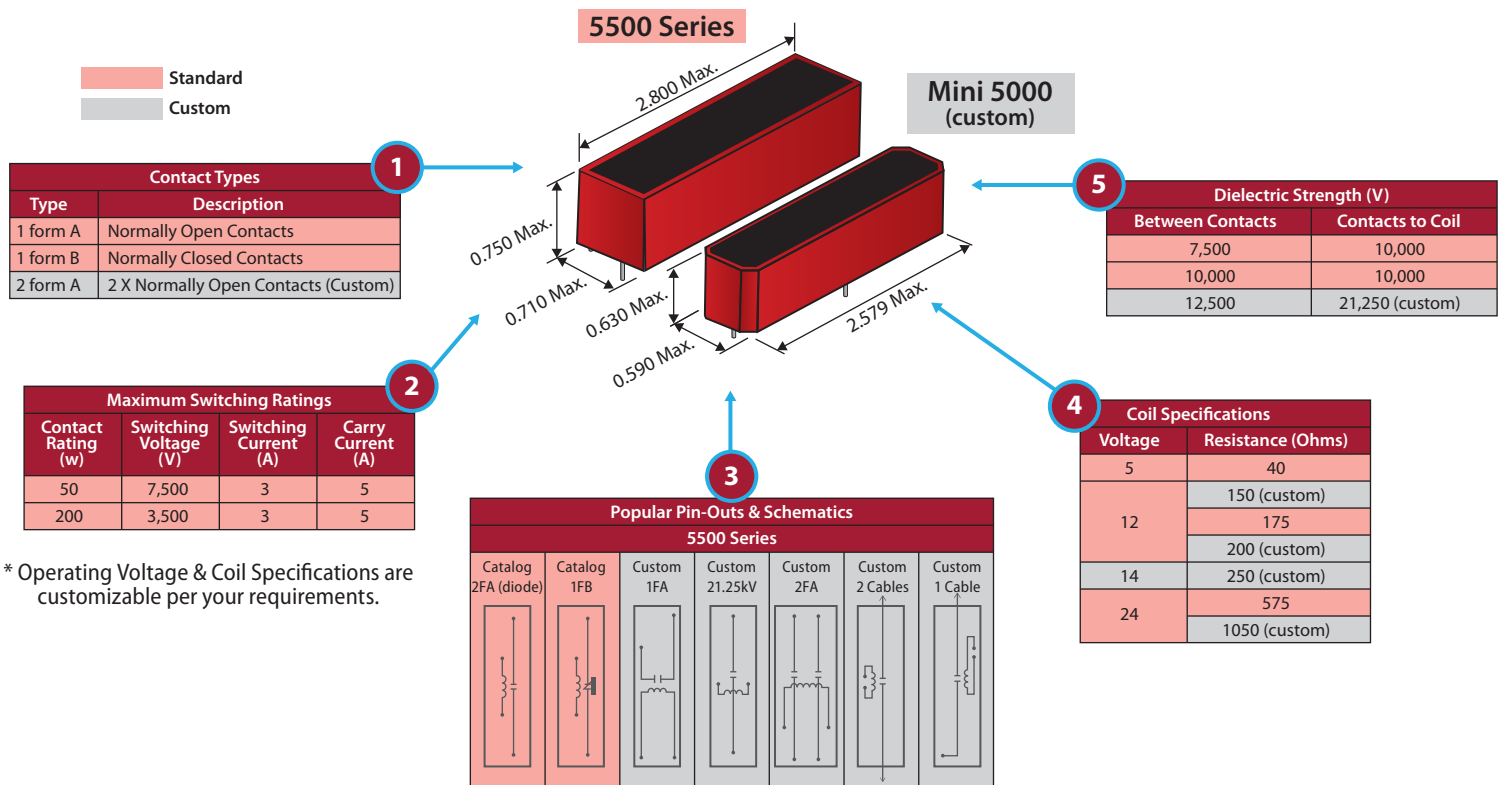
Selecting or customizing a high-voltage reed relay to meet your application's specific requirements is the first step towards ensuring a high-reliability component. Thorough testing further guarantees consistent and dependable operation.

For a comprehensive range of both standard and customized reed relay solutions engineered for high-voltage applications, consider products manufactured by Coto Technology. Designed with power ratings up to 200W, breaking voltages up to 12.5KV, and coil-to-contact insulation above 21KV, each relay is 100% tested using proven, proprietary automated reed relay test equipment. This specially-designed automated equipment was originally developed for the automated test equipment sector – where a single system can contain tens of thousands of Coto relays – and

consistently flawless operation of each component is crucial. This same requirement of manufacturing reliability extends to key markets, where relays are integral to critical security features, including isolation systems for homes, automobiles, renewable energy, and electro-medical surgical equipment.

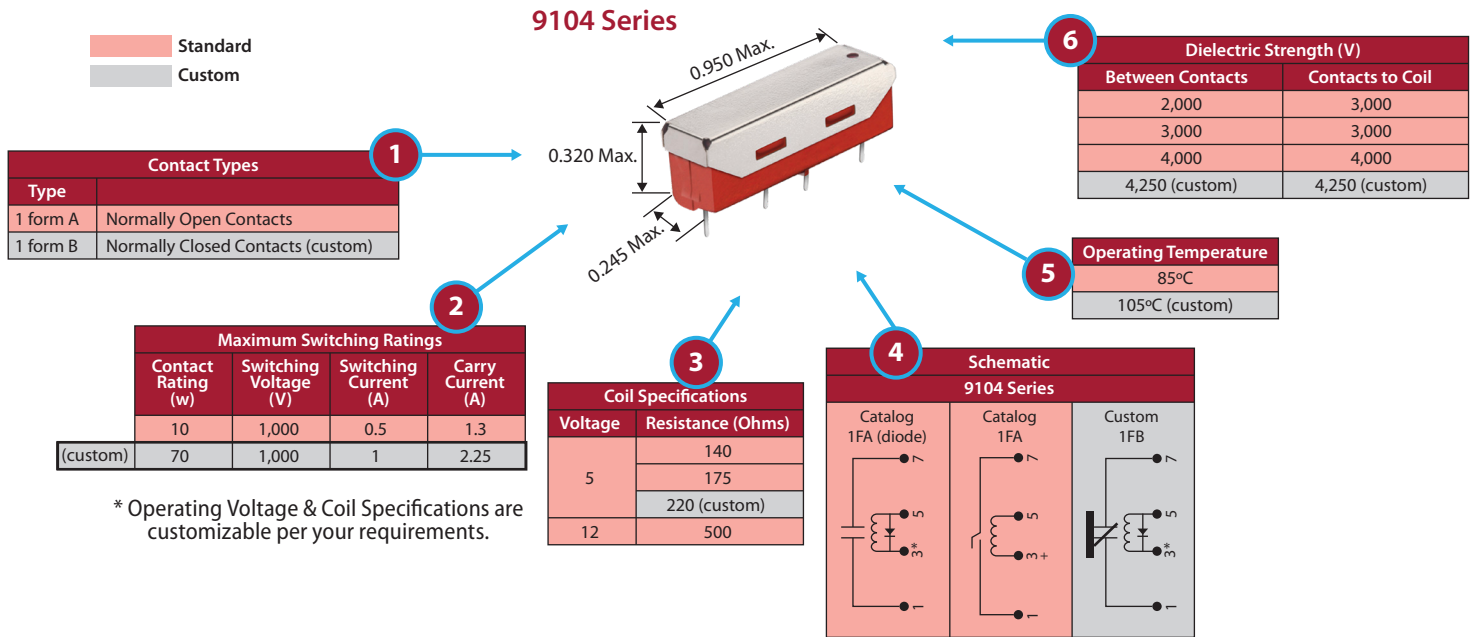
## Customization Variables with the 5500 & 9104 HV Reed Relays

Featured below are two highly-popular, high-voltage reed relays: The 5500 Series and the 9104 Series. Fig. 1 and Fig. 2 demonstrate the available standard and custom options. Each model is 100% guaranteed tested.



\* Operating Voltage & Coil Specifications are customizable per your requirements.

**Fig. 1:** Our 5500 series offers the highest voltage specifications. The key differentiator from other similar HV reed relays is the soft potting construction, which provides superior insulation, stress relief, and environmental protection, while the base plastic shell allows easy customization of pin layout and pin-to-pin distance.



**Fig. 2:** Our 9104 series is the ideal choice for a compact high-voltage package, offering an insulation voltage of up to 4.25kV between contacts and coils. It can handle up to 70W of switching power, and its magnetic shield enables the creation of high-voltage matrix configurations with relays placed side by side without magnetic coupling.

**100% Product Testing**

Coto's 100% testing guarantees product performance through a comprehensive range of parametric tests, including high-voltage dielectric withstand and insulation resistance. These HV tests are complemented by advanced contact performance testing, featuring unique Coto methods such as Dynamic Contact Resistance (DCR) and Contact Resistance Stability. The DCR test, original and proprietary to Coto, is more complex compared to standard industry methods. These tests ensure sorting accuracy, evaluate hermetic seal integrity, and assess internal stresses—critical factors in predicting potential failures that directly impact HV performance.

If you need assistance in finding the right part number for your application, or if you have any special requirements not resolved by our available standard and custom options, please direct your technical questions to our engineers via our website:

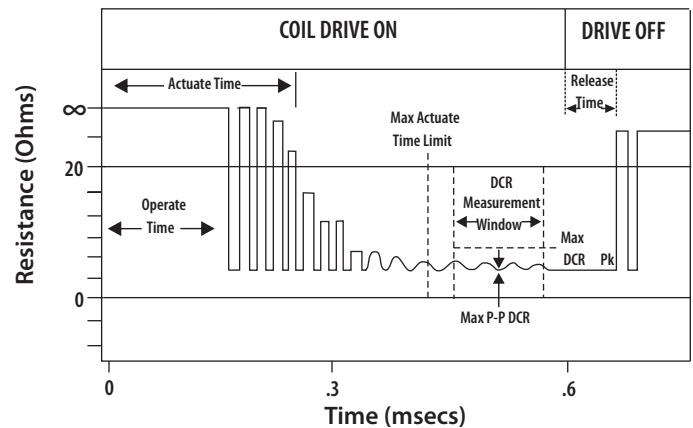
[www.cototechnology.com](http://www.cototechnology.com)



Review Coto's Complete Reed Relay Portfolio



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**Fig. 3:** Illustrating some of the key parameters tested in Coto's reed relays, this graph highlights the depth and complexity of the company's proprietary testing capabilities.

