

REEDS

For RF Relay Switches

SURON's custom designed reeds are key components for electromechanical RF relay switches, with high performance reliability for aerospace, space, and submarine systems.



2024



SURON
Precision Solutions

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Drawing upon more than three decades of expertise in reed manufacturing, our commitment extends to ongoing development and process refinement. Our primary objective is to offer advanced technical support, tailoring our services to meet the ever-changing requirements of our customers. We take great pride in our position as the leading supplier, delivering reeds of unparalleled quality and top-tier performance in the market.

Geometrical Properties

- Exceptional flatness of 0.01mm [.0005"] for good surface contact
- Free of burrs, internal stress, and micro cracks
- Centric drill for the RF pusher pin, characterized by straight, parallel cut walls, and tight diameter tolerance down to $\pm 0.01\text{mm}$ [.0005"]
- Tolerance of $\pm 0.025\text{mm}$ [.001"] for reed width
- Smooth faces and rounded edges, preventing chipping effect on the guide pins.

Materials

- CuBe2 (High Strength, High Conductivity)
- Phosphor Bronze

Platings

- Soft Gold (99.9% Au)
- Hard Gold (99.7% Au, 0.3% Co)
- Nickel
- Palladium
- 3 or 4 plating layers are possible on demand, allowing for improved conductivity and wear resistance

SURON's reeds are manufactured with materials that ensure high conductivity, strength and wear-resistance. The reeds' flatness ensures maintained uniform electrical contact. Tight control of linear dimensions enables smooth movement of the reeds inside the switch. Metal finish and electroplating provide an optimal combination of corrosion and wear resistance, along with improved conductivity.

Suron's major advantage is the unique ability to manufacture with a wide array of metal types, on thin sheets, with extreme precision

