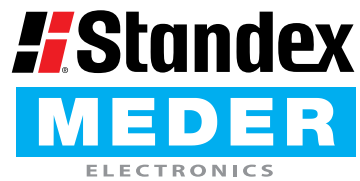


Application Alley

PARTNER | SOLVE | DELIVER

Reed Relays & Sensors

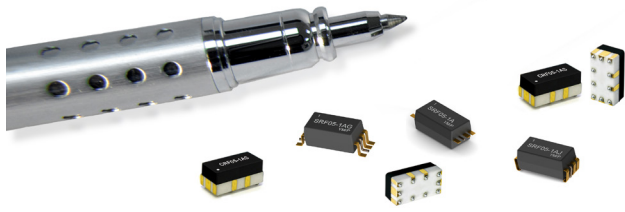
Why Standex-Meder Reed Relays and Reed Sensors?



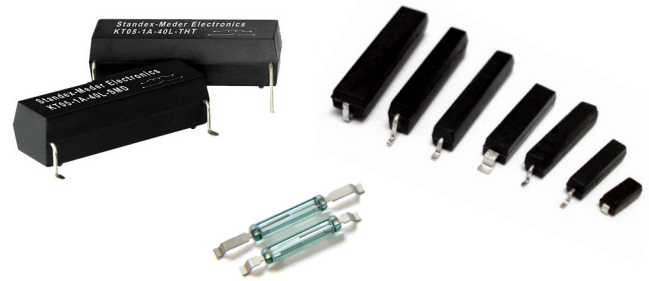
Custom
Engineered
Solutions for
Tomorrow

To meet the current electronic manufacturing trends surface mountable reed sensors and reed relays offer a long list of exceptional features when designed and packaged for surface mounting on printed circuit boards (PCBs). Their adaptable designs, rugged packaging, and capability of switching into the billions of operations make them an ideal design-in against other switching technologies.

The reed sensors and reed relays are packaged in low profiles with flat leads that meet all skewing and co-planar specifications. These accurately formed leads are generally bent into 'J' leads, gull leads, and axial leads, where gull leads are the most popular. "J" leads are utilized to minimize PCB space. Axial leads can be used to lower the component profile where a hole is cut or punched in the PCB allowing almost half of the sensor or relay to reside below the surface of the PCB. In this case, their RF characteristics are maximized as well. The reed sensors and relays with all the above lead configurations are generally packaged in 'tape and reel' for ease of customer manufacturability.



These rugged sensor and relay designs all use our hermetically sealed reed switches and packaging that takes their coefficient of thermal expansion (CTE) into consideration, where they are all closely matched to each other. This is a critical aspect of the design since the reed relays/sensors are typically subject to an infrared soldering process where they are immersed in oven temperatures as high as 300°C (572°F) for up to 3 to 4 minutes. The closely matched CTEs avoid any potential internal stress at the high ambients.



Standex-Meder Electronics designs are generally smaller than thru-hole designs and offer excellent quality and reliability. Because of their smaller size, the signal path through the reed relay or sensor is shorter, and is also shorter still, because the signal does not have to travel down the thru hole leads through a PCB, but simply stays on the PCB surface. This feature makes them ideally suited for RF applications and where switching very fast digital pulses are required.

All the features associated with Standex-Meder's reed switch technology are captured in the SME reed sensors and reed relays.

- Stable low contact resistance
- High switching voltages
- High carry currents
- High breakdown voltages
- Build-in hysteresis
- Ultra high insulation resistance
- Dynamic contact resistance testing and more

Surface Mount Sensor Series

Series	Dimensions		Illustration	
	mm	inches		
MK15	W	2.5	0.098	
	H	2.5	0.098	
	L	19.50	0.768	
MK16	W	2.3	0.091	
	H	2.3	0.091	
	L	15.60	0.614	
MK17	W	2.1	0.083	
	H	2.1	0.083	
	L	9.61	0.378	
MK22	W	2.7	1.060	
	H	2.3	0.091	
	L	15.60	0.614	
MK23-35	W	2.2	0.087	
	H	1.95	0.077	
	L	15.75	0.620	
MK23-66	W	2.2	0.087	
	H	2.7	1.060	
	L	19.60	0.772	
MK23-87	W	2.0	0.079	
	H	2.1	0.083	
	L	15.60	0.614	
MK23-90	W	2.54	0.100	
	H	3.05	0.120	
	L	24.9	0.980	
MK24	W	2.2	0.086	
	H	1.8	0.070	
	L	5.5	0.216	

Surface Mount RF Reed Relay Series

Series	Dimensions		Illustration	
	mm	inches		
SRF	W	4.0	0.157	
	H	3.2	0.126	
	L	7.5	0.295	
CRF	W	4.4	0.173	
	H	3.5	0.137	
	L	8.6	0.338	

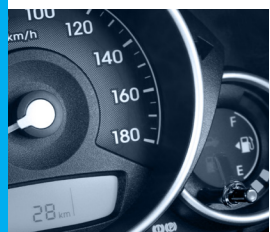
The SME reed sensors/relays open up numerous new applications not available in thru-hole technology and other mechanical switching devices. These new applications are found in:

Industry applications

Automatic test equipment (ATE), Instrumentation, Automotive, Marine and Boat, Appliances Consumer electronics, Water flow sensing, Telecom, Oil well drilling, Medical, Security Industrial, and others

Features

- Surface mountable
- Very low profile
- High quality and reliability
- Rugged thermoset over-molded packaging
- Ability to withstand high and low ambient temperatures
- Ability to meet solder reflow temperatures up to 300°C (572°F) for up to 3 to 4 minutes



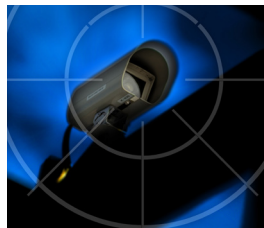
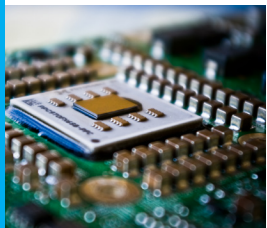
Why Standex-Meder Reed Relay and Reed Sensors?

- Ideal for RF characteristics
- Switch and carrying fast digital signal > 5 GHz
- Switch and carry signal level RF up to 20 GHz
- Skew rates less than 20 picoseconds
- 50Ω characteristic impedance
- Switch to shield capacitance <0.5 picofarads
- Dielectric strength across the contacts 200 volts

Standex-Meder Electronics reed relays and

reed sensors with their hermeticity offer better overall performance when designed for and used in a surface mounting environment. The design, size and technical characteristics are all enhanced.

Find out more about our ability to propel your business with our capabilities and solutions by visiting www.standexmeder.com. Give us a hello@standexelectronics.com today! One of our engineers or sales leaders will engage your team.



About Standex-Meder Electronics

Standex-Meder Electronics is a worldwide market leader in the design, development and manufacture of standard and custom electro-magnetic components, including magnetics products and reed switch-based solutions.

Our magnetic offerings include planar, Rogowski, current, and low- and high-frequency transformers and inductors. Our reed switch-based solutions include Meder, Standex and OKI brand reed switches, as well as a complete portfolio of reed relays, and a comprehensive array of fluid level, proximity, motion, water flow, HVAC condensate, hydraulic pressure differential, capacitive, conductive and inductive sensors.

We offer engineered product solutions for a broad spectrum of product applications in the automotive, medical, test and measurement, military and aerospace, as well as appliance and general industrial markets.

Standex-Meder Electronics has a commitment to absolute customer satisfaction and customer-driven innovation, with a global organization that offers sales support, engineering capabilities, and technical resources worldwide.

Headquartered in Cincinnati, Ohio, USA, Standex-Meder Electronics has eight manufacturing facilities in six countries, located in the United States, Germany, China, Mexico, the United Kingdom, and Canada.

For more information on Standex-Meder Electronics, please visit us on the web at www.standexmeder.com.

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