

HIGH VOLTAGE REED RELAYS

1kVDC / 10kVDC

DESCRIPTION

Standex Electronics features a full line of reed relays offering high voltage and high power configurations for PCB mount or free-standing applications.

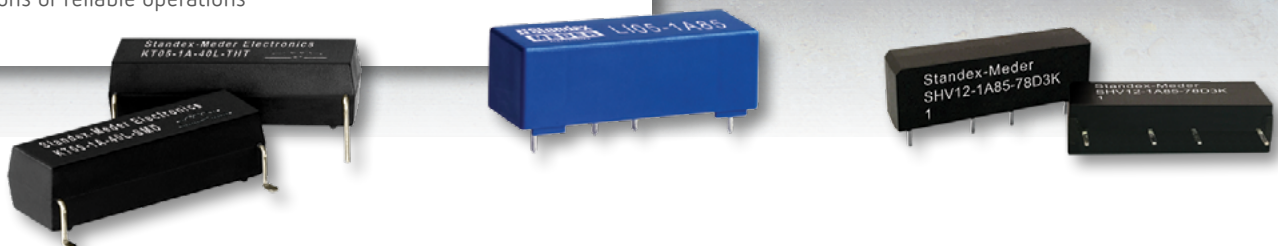
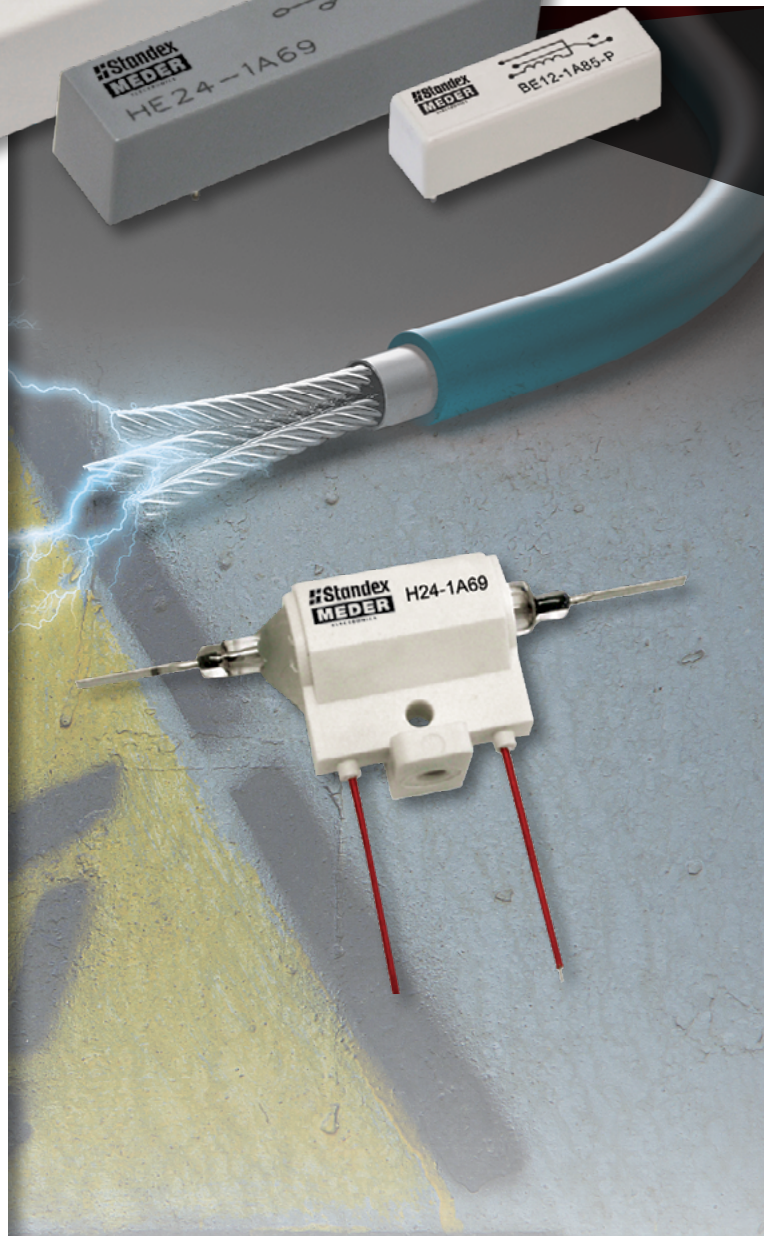
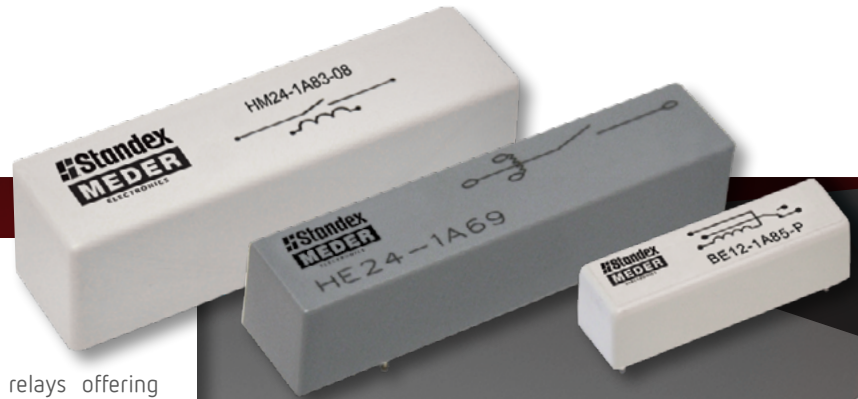
These Reed Relays are designed to switch high voltages up to 10kVDC and withstand even higher breakdown voltages up to 15kVDC, while ensuring Low Leakage Currents.

Versions for 1 kVDC are available in a compact housing, suitable especially for Battery Management Systems in Electric Vehicles, Solar Inverters, Medical applications and in High Voltage Test & Measurement field.

Mounting includes PCB mount or axial high voltage leaded versions with cables.

FEATURES

- Switching voltages up to 10kVDC, small compact housing for 1kVDC designs
- Breakdown voltages and Dielectric Strength up to 15kVDC
- High voltage termination wire available
- Carry currents up to 5 Amps continuous (10 Amps pulsed current)
- SMD mounting and AEC-Q200 (KT Series only)
- Suitable for High Density Matrix assembly (SHV Series only)
- Hermetically sealed switches with potted encapsulation or rugged thermoset molding (KT, SHV series)
- Dynamically tested contacts
- Millions of reliable operations



HIGH VOLTAGE REED RELAYS

1kVDC / 10kVDC

OPERATING CHARACTERISTICS

	KT SERIES	LI SERIES	SHV SERIES	BE SERIES	H SERIES	HE SERIES	HM SERIES
Coil Voltage VDC:	5, 12, 24	5, 12, 24	5, 12	5, 12, 24	12, 24	5, 12, 24	5, 12, 24
Coil Resistance Ω:	80-2700	200-3600	140-2000	10-10000	180-700	50-1500	30-1000
Contact Form:	1A	1A	1A	1-5A, 1-2B, 1-2C, 1E, 2A+2B	1A,1B	1A, 1B, 2A	1A, 1B, 1E
Rated Power Max. W:	100	100	100	100	50	50	50 (200)
Switching Voltage Max. VDC:	1kVDC	1kVDC	1kVDC	1kVDC	10kVDC	10kVDC	10kVDC
Breakdown Voltage Max. VDC:	4000	4200	4000	6000	15000	15000	15000
Switching Current Max. A:	1	1	1	1	3	3	3
Carry Current (100% Duty Cycle) Max. A:	2.5	2.5	2.5	2.5	5	5	5
Pulsed Current 10μs Typ. A:	5	5	5	5	10	10	10
Insulation Resistance Typ. Ω:	>10 ¹³	>10 ¹³	>5x10 ¹²	>10 ¹⁴	>10 ¹⁴	>10 ¹³	>10 ¹³
Dielectric Strength VDC:	7000	7000	4000	6000	15000	10000	15000

SERIES DATASHEET



MARKETS

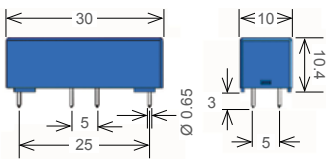
Automotive
 Solar Battery Management
 Medical
 Precision Test Equipment
 Cable Testers
 Automated Test Equipment (ATE)
 High Density Matrix

Automotive	X						
Solar Battery Management	X	X					
Medical	X			X		X	X
Precision Test Equipment				X	X		
Cable Testers	X	X				X	X
Automated Test Equipment (ATE)		X	X			X	X
High Density Matrix			X				

MECHANICAL/PACKAGING

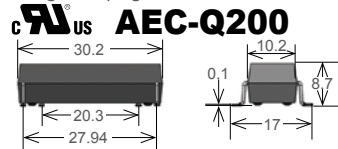
LI SERIES

THT - Potted encapsulation
 Many pin-outs available
 Breakdown up to 4200VDC



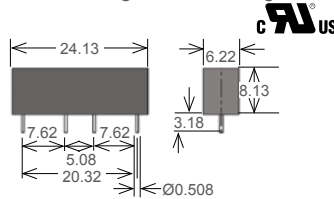
KT SERIES

SMD/THT - Robust overmolded
 IR >10¹³ Ω typ.
 Long creepage distances



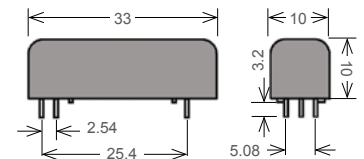
SHV SERIES

THT - Standard SIL
 Robust overmolded
 Internal magnetic shielding



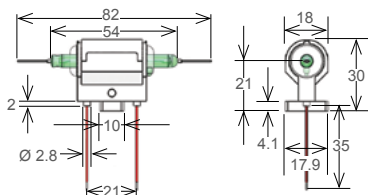
BE SERIES

THT - Potted encapsulation
 Many pin-outs available
 Up to 5 contacts (width will vary 10-20.4mm max.)



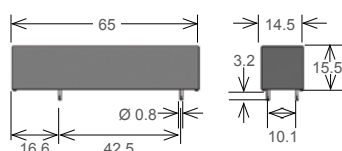
H SERIES

Special - Packaged coil with PCB pin out
 Switch contacts can be direct sky wired
 High insulation resistance



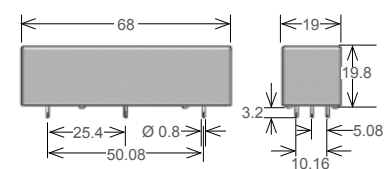
HE SERIES

THT - Potted encapsulation
 Many PCB pin configurations
 Compact housing design
 Optional HV lead wiring via direct wire



HM SERIES

THT - Potted encapsulation
 Many PCB pin configurations
 Robust design for high isolation
 Optional HV lead wiring via direct wire



Please note: All technical specifications on this flyer refer to the standard product range. Modifications in the sense of technical progress are reserved. For general information only. For more specific information, please consult the product datasheet, available upon request.

