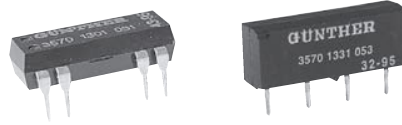


DIL-SIL-REED RELAYS



Version	DIL-Low Profile	SIL		
Contact Form	1 Normally Open	1 Normally Open		
Type	3570 1301 ...	3570 1331 ...		
Features	- Industry-standard	- Industry-standard		

Coil Parameters

		VDC	5	12	24	5	12	24						
Nominal coil voltage		VDC	5	12	24	5	12	24						
Pull-in voltage	max.	VDC	3,8	9	18	3,8	9	18						
Drop-out voltage	min.	VDC	0,8	1	2	0,8	1,5	2						
Operating voltage	max.	VDC	15	20	30	15	30	40						
Coil resistance	±10%	Ω	500	1000	2000	500	1000	2000						

Contact Parameters

Switching capacity	max.	W/VA	10			10								
Switching voltage	max.	V	100 AC/DC			100 AC/DC								
Switching current	max.	A	0,5			0,5								
Carrying current	max.	A	1,0			1,0								
Contact resistance	max.	mΩ	150			150								
Dielectric strength	min.	VDC	200			200								

Relay Parameters

Dielectric strength	coil/contact	VDC	1000			1000								
Insulation resistance	coil/contact	Ω	10 ¹⁰			10 ¹⁰								
Storage temperature		°C	-40...+105			-40...+105								
Operating temperature		°C	-35...+80			-35...+80								
Pull-in time incl. bounce time max.		ms	0,5			0,5								
Drop-out time with diode		ms	0,5			0,5								
Dimensions	page		20			20								
Weight	approx. g		1,8			1,6								
Pin configuration (top view)														

Vibration and Shock Resistance

During the evaluation of vibration and shock resistance, the relays are driven with nominal voltage. The switches should not open longer than 10 μsec.

	Normally Open	Change Over
Vibration resist.	20 g / 5...2000 Hz	10 g / 5...500 Hz
Shock resistance	100 g / 11 ms Sine half wave	50 g / 11 ms Sine half wave

Washability

Resistant to Caltron, Freon, alcohol and distilled (pure) water. During the final rinsing phase only the purest substances should be used.

Capacitance

The capacitance parameters are regarded as typical and are calculated for versions without shielding:

Capacitance, measured...	N.O.	Change Over
across open contact	0,8 pF	2,5 pF
between open contact and coil	1,5 pF	2,5 pF
between closed contact and coil	3,0 pF	2,5 pF

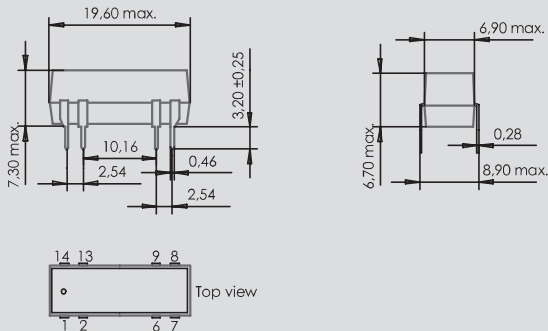
Solderability

By using laser welding in manufacture, a number of our DIL-SIL-Reed Relays are suitable for enhanced soldering requirements. All relays meet the DIN 8505 requirements.

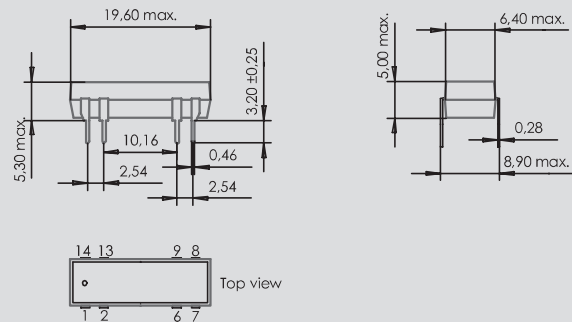
Hole Diameter in PCB: Ø 0,65 mm

DIL-SIL-REED RELAYS

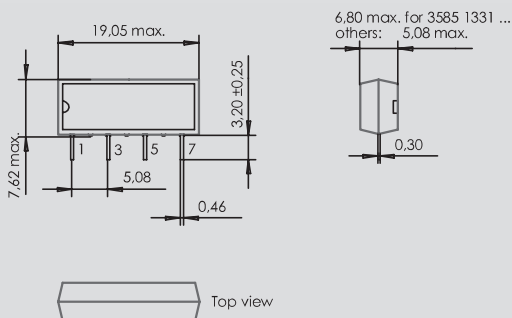
DIL-High Profile



DIL-Low Profile



SIL



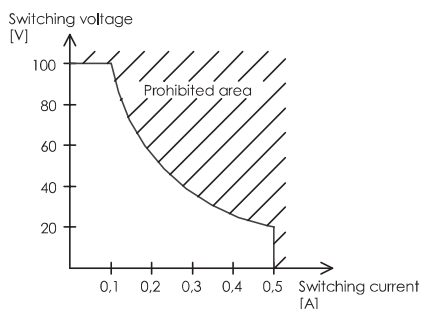
Dimensions in mm

Pull-in and Drop-out Voltage, Coil Resistance

The tolerances indicated are valid at 25 °C ± 3 °C. The temperature coefficient of the coil resistance is 0,4 % / °C.

Switching Voltage, Current and Capacity

The parameters as listed for switching voltage, current and capacity are maximum values. Exceeding any one of these values causes overload and reduces relay life expectancy.



Contact Resistance

The contact resistance indicated is valid for new relays at nominal coil voltage.

The four-point method at 2 VDC / 100 mA or 10 mA is applied. Custom solutions for special applications, especially for switching signals smaller than 1 mV at 10 µA (low-level-applications) or applications requiring dynamic contact resistance measurement can be produced for special switching needs.

Temperature Range

The operating temperature of the relay is the equivalent of the internal temperature. If the relays are used in ambient temperatures (ϑ_a) higher than 20 °C, the maximum permissible operating voltage (U_T) must be calculated according to the table indicated below, using the formula:

$$U_T = U_{\max} \times k_1$$

(U_{\max} = max. permissible operating voltage)

ϑ_u (°C)	20	30	40	50	60	70
k_1	1,00	0,96	0,92	0,78	0,74	0,70

Switching Time

When using dry Reed Switches in relays, contact bounce may occur.

Pull-in time (incl. bounce time) typ. 0,5...1,8 ms
at nominal voltage and 20 Hz

Drop-out time (with diode) typ. 0,5...1,5 ms
at nominal voltage and 20 Hz

Magnetic Shieldings

Magnetic shieldings for Reed Relays are also available:

- magnetic shieldings for SIL-Reed Relays:
 - top side and side by side
 - top side and front end
 - top side, side by side and front end
- magnetic shieldings for DIL-Reed Relays:
 - top side, side by side and front end suitable for the DIL-High profile

Comment

Relay versions with 15 V nominal coil voltage are available for orders exceeding min. quantity of 1.000 pieces.