Products for tomorrow...

Description

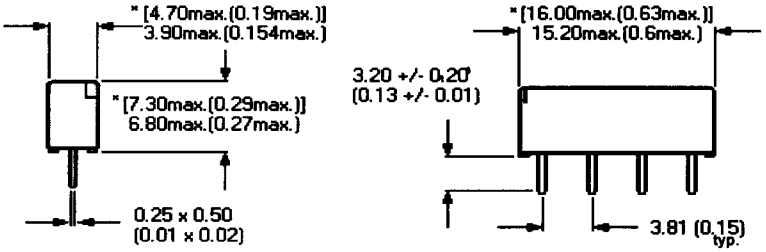
This small SIL is a replacement for the larger SIL relays having twice the square footage

Features

Single 1 Form A (SPST) contact
Magnetic shield versions available
Diode option available
High coil resistance options available
Half the mounting space of conventional SIL relays

Applications

Automatic test equipment
Measurement equipment
Telecommunications
Security systems
Medical electronics
Industrial control



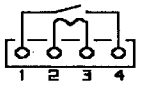
Tolerance +/- 0.10 mm (0.004 in)

** Dimensions for versions with external magnetic screen option*

***Mark represents Pin 1*

Top view

Schematic Diagram



Approvals and Certifications

UL, VDE, EN60950
ISO9001, QS9000 pending

	Contact 71
Contact type	Standard
Contact form	Form 1A
Optional diode	See ordering information
Optional magnetic shield	See ordering information

All data at 20 °C

Parameter	Conditions	Sym.	Min	Typ	Max	Units
Coil Characteristics***						
5 Volt coil drive	Operating voltage			5	7.5	Volts
	Coil resistance		252	280	308	Ω
	Must Operate Voltage		0.8		3.5	Volts
	Must Reset voltage		0.75		3.5	Volts
12 Volt coil drive	Operating voltage			12	16	Volts
	Coil resistance		630	700	770	Ω
	Must Operate Voltage		1.8		8.4	Volts
	Must Reset voltage		1.8		8	Volts
Contact Ratings						
Rated Power	DC/peak AC Resistive	W			10	Watts
Switching Voltage	DC/peak AC Resistive	V			200	Volts
Switching Current	DC/peak AC Resistive	A			0.5	Amps
Carry Current	DC/peak AC Resistive	A			1.5	Amps
Static Contact Res.	50mV @ 10mA @ nom. volt.	CR			150	mΩ
Dynamic Contact Res.	0.5V@50mA, 100 Hz					
	and after 1.5ms @ nom. volt.	DCR			200	mΩ
Life expectancy	Switching1.0 V with 10ma	10^6	1000			ops
	Rated Loads (consult factory)					ops
Contact material				Ru		
Relay Specifications						
Dielectric Strength	Across contact		250			DCV
	Contact to coil	I/O	1500			DCV
Capacitance	Across switch			0.2		pf
	Switch to coil			2		pf
Operating time	Including bounce	Top			500	µs
Release time	No suppression	Trel			50	µs
	Diode suppressed	Trel			300	µs
	Diode and 24V zener	Trel			100	µs
Insulation Resistance	Across switch	IR	10^{10}	10^{12}		Ω
	Switch to coil	IR	10^{12}	10^{14}		Ω
Environmental Ratings						
Operating temperature		To	-40		85	°C
Storage temperature		Ta	-40		100	°C
Soldering time					10	sec
Solder temperature					260	°C
Cleaning				Fully Sealed		
Shock	At 11 ms +/-1ms; 1/2 sine wave	S			50	Gs
Vibration	10Hz to 2000Hz	G			10	Gs

*** The coil resistance, operate and reset characteristics will all change at the rate of 0.4%0 C

Ordering Information

MS	XX-	XXXX-	75	X
Series	*Nominal Voltage*	*Contact Type*		*Option*
	5	1A71		L - no option
	12			M - with magnetic screen
				D - with diode, no magnetic screen (pins +2, -3)
				E - with diode, with magnetic screen (pins +2, -3)
				HR - high coil resistance version (5V 500Ω only)

Products for tomorrow...

Description

Compact design molded reed relays suitable for all current soldering and washing methods.

Applications

Automatic test equipment
Measurement equipment
Telecommunications
Security systems
Medical electronics
Industrial control

Features

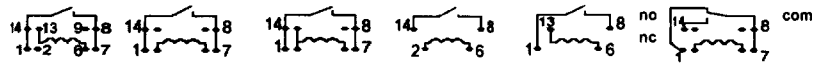
Low profile package
Standardized pin configurations
Versions with diode available
Versions with mercury-wetted switches available
IC-pin compatible
TTL drive possible
4.25 kVDC insulation for diagram 13 option
Most widespread and compatible to all current brands

Approvals and Certifications

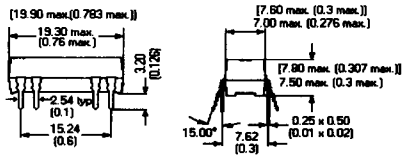
UL

Top view

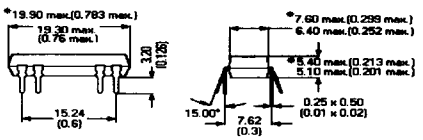
10 11 12 13 16 51



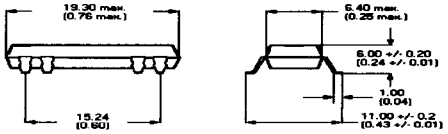
DIP *High Profile*



Flat Profile



SMD



Tolerance +/- 0.10 mm (0.004 in)

** Dimensions are valid for versions with magnetic shield*

Ordering Information

XXX	XX-	XXXX-	XX	X	**Options**
Series	*Nominal*	*Contact Type*	*Diagram*	*Option****	L - no options
DIP or	*Voltage*	1A71-	10	(A/B/C/E)	A - diode (pins +6, -9)
SMD***	5 or 12	1A71-	11	(A/D**/E/F**	B - electrostatic sheild (pin 2)
		1A71-	12	(A/D**/E/F**	C - diode (pins +6, -9), electrostatic shield (pin 2)
		1A71-	13	(D**)	D - diode (pins +2, -6)
		1A84-	10	(A/B/C/E)	E - electrostatic shield (pin 9)
		1A84-	11	(A/D**/E/F**	F - diode (pins +2, -8), electrostatic shield (pin 9)
		1A84-	12	(A/D**/E/F**)	
		1A84-	13	(D**)	
		1C90-	51	(A/D**/E**/F**)	

**Indicates high profile package.
Options with no asterisk are low profile package.
***Add L when no options are selected
****SMD package avail. in diagrams 10, 11, 12, & 16 only, & with no options.

All data at 20°C

Parameter	Conditions	Sym.	Contact 71 Standard Form 1A Min	Contact 71 Typ	Contact 71 Max	Contact 84 High Dielectric Form 1A Min	Contact 84 Typ	Contact 84 Max	Contact 90 Standard Form C Form 1C Min	Contact 90 Typ	Contact 90 Max	Units
Coil Characteristics******												
5 Volt coil drive	Operating voltage			5	7.5		5	7.5		5	7.5	Volts
	Coil resistance		450	500	550	180	200	220	180	200	220	Ω
	Must Operate Voltage		0.8		3.5	0.8		3.5	0.8		3.5	Volts
	Must Reset voltage		0.75		3.5	0.75		3.5	0.75		3.5	Volts
12 Volt coil drive	Operating voltage			12	16		12	16		12	16	Volts
	Coil resistance		900	1000	1100	900	1000	1100	450	500	550	Ω
	Must Operate Voltage		1.8		8.4	1.8		8.4	1.8		8.4	Volts
	Must Reset voltage		1.8		8	1.8		8	1.8		8	Volts
Contact Ratings												
Rated Power	DC/peak AC Resistive	W			10			10			3	Watts
Switching Voltage	DC/peak AC Resistive	V			200			250			175	Volts
Switching Current	DC/peak AC Resistive	A			0.5			0.5			0.25	Amps
Carry Current	DC/peak AC Resistive	A			1.5			1.5			1.2	Amps
Static Contact Res.	50mV @ 10mA @ nom. volt.	CR			150			150			150	mΩ
Dynamic Contact Res.	0.5V@50mA, 100 Hz and after 1.5ms @ nom. volt.	DCR			200			200			ne	mΩ
Life expectancy	Switching1.0 V with 10ma Rated Loads (consult factory)	10^6	1000			1000			200			ops ops
Contact material				Ru			Ru			Ru		
Relay Specifications												
Dielectric Strength	Across contact		250			700			200			DCV
	Contact to coil	I/O	1500			1500			1500			DCV
	Contact to coil (option 13(L) only)	I/O	4250			4250			4250			DCV
Capacitance	Across switch			0.2			0.2			0.3		pf
	Switch to coil			2			2			2.5		pf
	Switch to shield			1.8			1.8			2.5		pf
Operating time	Including bounce	Top			500			700		700	1000	µs
Release time	No supression	Trel			50			50			2000	µs
	Diode supressed	Trel			300			350			1500	µs
	Diode and 24V zener	Trel			100			150			1500	µs
Insulation Resistance	Across switch	IR	10^{10}	10^{12}		10^{10}	10^{11}		10^9	10^{11}		Ω
	Switch to coil	IR	10^{12}	10^{14}		10^{12}	10^{14}		10^{12}	10^{14}		Ω
Environmental Ratings												
Operating temperature		To	-40		85	-40		85	-40		85	°C
Storage temperature		Ta	-40		100	-40		100	-40		100	°C
Soldering time					10			10			10	sec
Solder temperature					260			260			260	°C
Cleaning				Fully Sealed			Fully Sealed			Fully Sealed		
Shock	At 11 ms +/-1ms; 1/2 sine wave	S			50			50			50	Gs
Vibration	10Hz to 2000Hz	G			10			35			30	Gs

***** SMD available in contact type 71 and 84 only
******The coil resistance, operate and reset characteristics will all change at the rate of 0.4%°C

Notes: 1. 2 Form A and 1 Form B available. 2. An SMD line sense version for telecommunications is available under SMD-CL-1A81-15-11M

Products for tomorrow...

Description

The SIL series is available as both voltage and current (line sense) driven Reed Relays. They require only half the board space of the standard DIP relay

Features

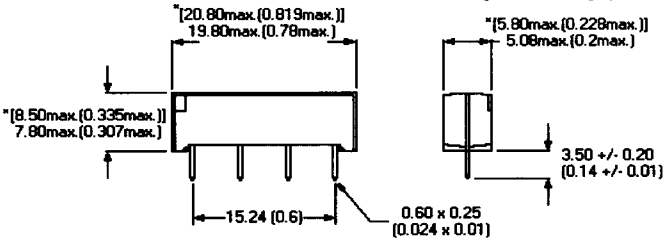
Contacts come in a single 1 Form A and 1 Form B (SPST)
Several contact ratings available
High coil resistance option available
Diode option available
Half the mounting space of conventional DIL Relays
Magnetic shielding option

Applications

Automatic Test Equipment
Measurement equipment
Telecommunications
Security systems
Medical electronics
Industrial control

Approvals and Certifications

EN60950
VDE
UL
CSA
ISO 9001
QS 9000 pending



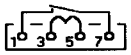
Tolerance +/- 0.10 mm (0.004 in)
*Dimensions with magnetic screen
**Mark represents pin 1

Ordering Information

SIL	XX-	XXXX-	XXX
Series	*Nominal Voltage*	*Contact Type*	*Options*
	5	1A71	71L - no option
	12	1A75	71M - with magnetic shield
		1A84	71D - with diode, no magnetic shield (pins +3, -5)
			71Q - with diode, with magnetic shield (pins +3, -5)

Top view

Schematic Diagram



All data at 20 °C

			Contact 71			Contact 75			Contact 84			
	Contact type			Standard		High Dielectric			High Dielectric			
	Contact form			Form A***			Form A***			Form A***		
Parameter	**Conditions**	**Sym.**	**Min**	**Typ**	**Max**	**Min**	**Typ**	**Max**	**Min**	**Typ**	**Max**	**Units**
Coil Characteristics**												
5 Volt coil drive	Operating voltage			5	7.5		5	7.5		5	7.5	Volts
	Coil resistance		450	500	550	180	200	220	180	200	220	Ω
	Must Operate Voltage		0.75		3.5	0.75		3.5	0.75		3.5	Volts
	Must Reset voltage		0.75		3.5	0.75		3.5	0.75		3.5	Volts
12 Volt coil drive	Operating voltage			12	16		12	16		12	16	Volts
	Coil resistance		900	1000	1100	900	1000	1100	900	1000	1100	Ω
	Must Operate Voltage		1.8		8.4	1.8		8.4	1.8		8.4	Volts
	Must Reset voltage		1.8		8.4	1.8		8.4	1.8		8.4	Volts
Contact Ratings												
Rated Power	DC/peak AC Resistive	W			10			10			10	Watts
Switching Voltage	DC/peak AC Resistive	V			200			250			250	Volts
Switching Current	DC/peak AC Resistive	A			0.5			0.5			0.5	Amps
Carry Current	DC/peak AC Resistive	A			1.5			1.5			1.5	Amps
Static Contact Res.	50mV @ 10mA @ nom. volt.	CR			150			150			150	mΩ
Dynamic Contact Res.	0.5V@50mA, 100 Hz											
	and after 1.5ms @ nom. volt.	DCR			200			250			200	mΩ
Life expectancy	Switching1.0 V with 10ma	10^6	1000			1000			1000			ops
	Rated Loads (consult factory)											ops
Contact material				Ru			Rh			Rh		
Relay Specifications												
Dielectric Strength	Across contact		250			1500			700			DCV
	Contact to coil	I/O	1500			1500			1500			DCV
Capacitance	Across switch			0.2			0.2			0.2		pf
	Switch to coil			2			2			2		pf
Operating time	Including bounce	Top			500			700			700	µs
Release time	No suppression	Trel			50			50			50	µs
	Diode suppressed	Trel			300			350			350	µs
	Diode and 24V zener	Trel			100			150			150	µs
Insulation Resistance	Across switch	IR	10^{10}	10^{12}		10^{10}	10^{12}		10^{10}	10^{11}		Ω
	Switch to coil	IR	10^{12}	10^{14}		10^{12}	10^{14}		10^{12}	10^{14}		Ω
Environmental Ratings												
Operating temperature		To	-40		85	-40		85	-40		85	°C
Storage temperature		Ta	-40		100	-40		100	-40		100	°C
Soldering time					10			10			10	sec
Solder temperature					260			260			260	°C
Cleaning				Fully Sealed			Fully Sealed			Fully Sealed		
Shock	At 11 ms +/-1ms; 1/2 sine wave	S			50			50			50	Gs
Vibration	10Hz to 2000Hz	G			10			10			10	Gs

*** Form B relays available

**** The coil resistance, Operate and reset characteristics will all change at the rate of 0.4% °C

Products for tomorrow...

7

RELAYS

Description

Miniature Reed Relays
for high-frequency switching

Applications

RF communications
Video switching
ATE

Features

Magnetic shield
High reliability
Versions with 1 form A & 1 form C switch
with electrostatic and coaxial shield available
Switching frequencies up to 1Ghz

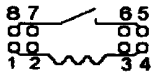
Ordering Information

LP	XXXX-	XX	X
Series	*Contact Type*	*Diagram*	*Option*
	1A71	80	U - Standard
	1C90	81	V - Electrostatic shield on pin 7
		90	W - Coaxial shield on pin 6 & 7

Top view

Schematic Diagrams

80



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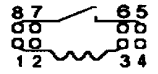

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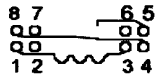

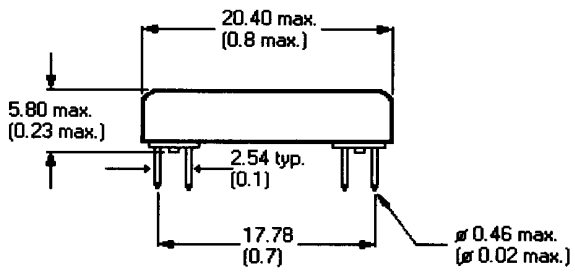

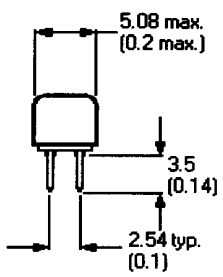

Tolerance +/- 0.10 mm (0.004 in)
Except as noted

All data at 20 °C	Contact type	**Contact 71**			**Contact 90**			
	Contact form	Standard Form 1A			Standard Form C Form 1C			
Parameter	**Conditions**	**Sym.**	**Min**	**Typ**	**Max**	**Min**	**Typ**	**Max**	**Units**
Coil Characteristics*									
5 Volt coil drive	Operating voltage			5	7.5		5	7.5	Volts
	Coil resistance		207	230	253	171	190	209	Ω
	Must Operate Voltage		0.8		3.5	0.8		3.5	Volts
	Must Reset voltage		0.8		3.5	0.8		3.5	Volts
12 Volt coil drive	Operating voltage			12	16		12	22	Volts
	Coil resistance		855	950	1045	693	770	847	Ω
	Must Operate Voltage		1.8		8.4	1.8		8.4	Volts
	Must Reset voltage		1.8		8.4	1.8		8.4	Volts
Contact Ratings									
Rated Power	DC/peak AC Resistive	W			10			3	Watts
Switching Voltage	DC/peak AC Resistive	V			200			175	Volts
Switching Current	DC/peak AC Resistive	A			0.5			0.25	Amps
Carry Current	DC/peak AC Resistive	A			1.5			1.2	Amps
Static Contact Res.	50mV @ 10mA @ nom. volt.	CR			150			150	mΩ
Dynamic Contact Res.	0.5V@50mA, 100 Hz								
	and after 1.5ms @ nom. volt.	DCR			200			na	mΩ
Life expectancy	Switching1.0 V with 10ma	10^6	1000			200			ops
	Rated Loads (consult factory)								ops
Relay Specifications									
Dielectric Strength	Across contact		250			200			DCV
	Contact to coil	I/O	1500			1500			DCV
Capacitance	Across switch			0.2			0.3		pf
	Switch to coil			2			2.5		pf
	Switch to shield			1.8			2.5		pf
Operating time	Including bounce	Top			500		700	1000	µs
Release time	No suppression	Trel			50			2000	µs
	Diode suppressed	Trel			300			1500	µs
	Diode and 24V zener	Trel			100			1500	µs
Insulation Resistance	Across switch	IR	10^{10}	10^{12}		10^9	10^{11}		Ω
	Switch to coil	IR	10^{12}	10^{14}		10^{12}	10^{14}		Ω
Environmental Ratings									
Operating temperature		To	-20		70	-20		70	°C
Storage temperature		Ta	-25		85	-25		85	°C
Soldering time					5			5	sec
Solder temperature					260			260	°C
Cleaning				Fully Sealed			Fully Sealed		
Shock	At 11 ms +/-1ms; 1/2 sine wave	S			50			50	Gs
Vibration	10Hz to 2000Hz	G			10			10	Gs

* The coil resistance, Operate and reset characteristics will all change at the rate of 0.4% °C

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Products for tomorrow...

Description

Miniature Reed Relays
with magnetic shield

Applications

Alarm systems
Computer peripherals

Features

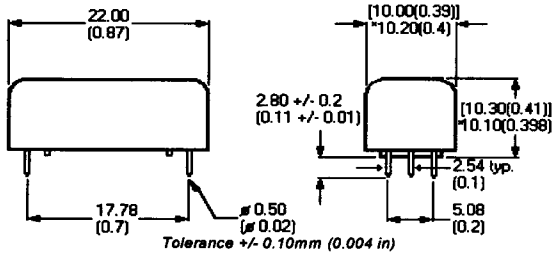
High resistance coils up to 11.000 Ohm at 12V
Contact forms 1A, 1C
Compatible pin configurations
Various standard switch options
Package size of only 10.2x22 mm

Approvals and Certifications

UL
EN60950

Ordering Information

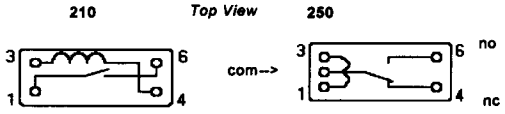
NP	XX-	XXXX-	XX-	XXX
Series	*Nominal Voltage*	*Contact Type*	*Coil Resistance*	*Diagram*
	5	1A71	500	210
	12	1A71	1300	210
	5	1A84	500	210
	12	1A84	2,500	210
	5	1C90	500	250
	12	1C90	2500	250



Tolerance +/- 0.10mm (0.004 in)

** Dimensions are valid for plastic case versions*

Schematic Diagrams



All data at 20 °C

			Contact 71			Contact 84			Contact 90			
	Contact type		Standard			High Dielectric			Standard Form C			
	Contact form		Form 1A			Form 1A			Form 1C			
Parameter	**Conditions**	**Sym.**	**Min**	**Typ**	**Max**	**Min**	**Typ**	**Max**	**Min**	**Typ**	**Max**	**Units**
Coil Characteristics**												
5 Volt coil drive	Operating voltage			5	7.5		5	7.5		5	7.5	Volts
	Coil resistance		450	500	550	450	500	550	450	500	550	Ω
	Must Operate Voltage		0.75		3.5	0.75		3.5	0.75		3.5	Volts
	Must Reset voltage		0.75		3.5	0.75		3.5	0.75		3.5	Volts
12 Volt coil drive	Operating voltage			12			12			12		Volts
	Coil resistance		1170	1300	1430	2250	2500	2750	2250	2500	2750	Ω
	Must Operate Voltage		1.8		8.4	1.8		8.4	1.8		8.4	Volts
	Must Reset voltage		1.8		8.4	1.8		8.4	1.8		8.4	Volts
Contact Ratings												
Rated Power	DC/peak AC Resistive	W			10			10			3	Watts
Switching Voltage	DC/peak AC Resistive	V			200			250			175	Volts
Switching Current	DC/peak AC Resistive	A			0.5			0.5			0.25	Amps
Carry Current	DC/peak AC Resistive	A			1.5			1.5			1.2	Amps
Static Contact Res.	50mV @ 10mA @ nom. volt.	CR			150			150			150	mΩ
Dynamic Contact Res.	0.5V@50mA, 100 Hz and after 1.5ms @ nom. volt.	DCR			200			200			na	mΩ
Life expectancy	Switching1.0 V with 10ma	10^6	1000			1000			200			ops
	Rated Loads (consult factory)											ops
Contact material				Ru			Rh			Rh		
Relay Specifications												
Dielectric Strength	Across contact		250			700			200			DCV
	Contact to coil	I/O	1500			1500			1500			DCV
Capacitance	Across switch			0.2			0.2			0.3		pf
	Switch to coil			2			2			2.5		pf
Operating time	Including bounce	Top			500			700		700	1000	µs
Release time	No supression	Trel			50			50			2000	µs
	Diode supressed	Trel			300			350			1500	µs
	Diode and 24V zener	Trel			100			150			1500	µs
Insulation Resistance	Across switch	IR	10^{10}	10^{12}		10^{10}	10^{11}		10^9	10^{11}		Ω
	Switch to coil	IR	10^{12}	10^{14}		10^{12}	10^{14}		10^{12}	10^{14}		Ω
Environmental Ratings												
Operating temperature		To	-40		70	-40		70	-40		70	°C
Storage temperature		Ta	-40		85	-40		85	-40		85	°C
Soldering time					5			5			5	sec
Solder temperature					260			260			260	°C
Cleaning				Fully Sealed			Fully Sealed			Fully Sealed		
Shock	At 11 ms +/-1ms; 1/2 sine wave	S			50			50			50	Gs
Vibration	10Hz to 2000Hz	G			10			10			10	Gs

** The coil resistance, Operate and reset characteristics will all change at the rate of 0.4% °C

Note: Higher coil resistances available

Products for tomorrow...

Description

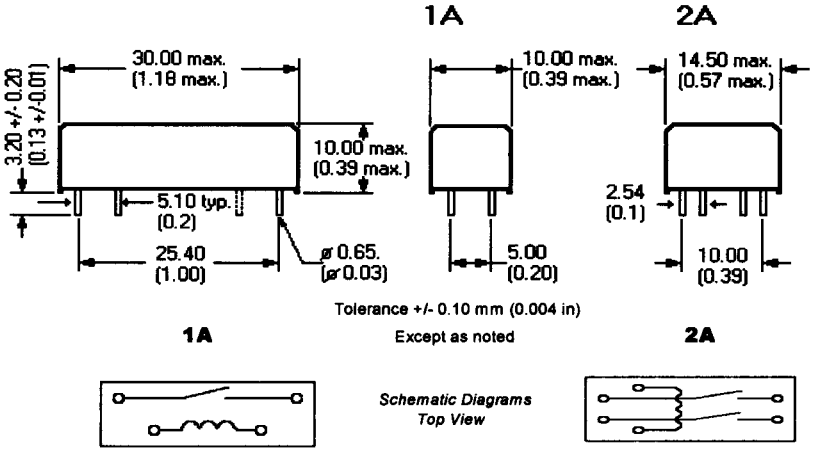
Miniature Reed Relay

Applications

Test, measurement,
and control equipment

Features

Up to 4 form A switches available
(dry/mercury wetted) or 1-4 form C switches
Various switch types with high isolation available
Versions with high insulation
resistance (10^{14} Ohm)



Ordering Information

MRE	XX-	XX-	HI
Series	*Nominal Voltage*	*Contact Type*	*Insulation resistance 10^{14} Ohm (only for switch 79)*
	5	1A71	
	12	1A74	
		1A79	

(Adding 2A for 2 poles)

All data at 20 °C	Contact type	Contact 71			Contact 74			Contact 79			
	Contact form	Standard			High Current			High Insulation Res.			
		Form 1A			Form1A			Form1A			
Parameter	**Conditions**	**Sym.**	**Min**	**Typ**	**Max**	**Min**	**Typ**	**Max**	**Min**	**Typ**	**Max**	**Units**
Coil Characteristics*												
5 Volt coil drive	Operating voltage (A/B)			5	7.5		5	7.5		5	7.5	Volts
	Coil resistance		306	340	374	306	340	374	193.5	215	236.5	Ω
	Must Operate Voltage		1		3.8	1		3.8	1		3.8	Volts
	Must Reset voltage		1		3.8	1		3.8	1		3.8	Volts
12 Volt coil drive	Operating voltage (A/B)			12	16		12	16		12	16	Volts
	Coil resistance		1170	1300	1430	1170	1300	1430	810	900	990	Ω
	Must Operate Voltage		2		9	2		9	2		9	Volts
	Must Reset voltage		2		9	2		9	2		9	Volts
Contact Ratings												
Rated Power	DC/peak AC Resistive	W			10			30			25	Watts
Switching Voltage	DC/peak AC Resistive	V			200			200			1000	Volts
Switching Current	DC/peak AC Resistive	A			0.5			1			1	Amps
Carry Current	DC/peak AC Resistive	A			1.5			2.5			2	Amps
Static Contact Res.	50mV @ 10mA @ nom. volt.	CR			150			120			150	mΩ
Dynamic Contact Res.	0.5V@50mA, 100 Hz											
	and after 1.5ms @ nom. volt.	DCR			200			200			200	mΩ
Life expectancy	Switching1.0 V with 10ma	10^6	1000			1000			1000			ops
	Rated Loads (consult factory)											ops
Contact material				Ru			Rh			Rh		
Relay Specifications												
Dielectric Strength	Across contact		250			430			2500			DCV
	Contact to coil	I/O	1500			1500			2500			DCV
Capacitance	Across switch			0.2			0.2			0.2		pf
	Between switches			0.3			0.3			0.3		pf
	Switch to coil			2			2			2		pf
Operating time	Including bounce	Top			500			500			1000	µs
Release time	No suppression	Trel			50			50			50	µs
	Diode suppressed	Trel			300			300			300	µs
	Diode and 24V zener	Trel			100			100			100	µs
Insulation Resistance	Across switch	IR	10^{10}	10^{12}		10^{10}	10^{12}		10^{10}	10^{12}		Ω
	Switch to coil	IR	10^{12}	10^{14}		10^{12}	10^{14}		10^{12}	10^{14}		Ω
Environmental Ratings												
Operating temperature		To	-20		70	-20		70	-20		70	°C
Storage temperature		Ta	-40		100	-40		100	-40		100	°C
Soldering time					5			5			5	sec
Solder temperature					260			260			260	°C
Cleaning				Fully Sealed			Fully Sealed			Fully Sealed		
Shock	At 11 ms +/-1ms; 1/2 sine wave	S			50			50			50	Gs
Vibration	10Hz to 2000Hz	G			10			10			10	Gs

* The coil resistance, Operate and reset characteristics will all change at the rate of 0.4%°C
Note: Other switches available upon request
Note: 4 pole available

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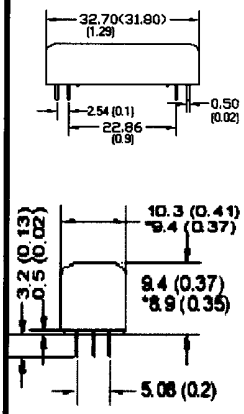
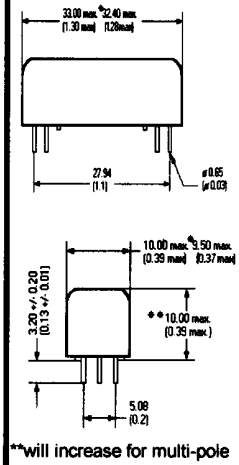
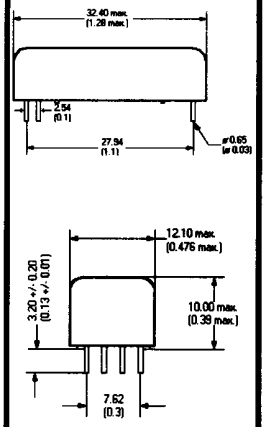
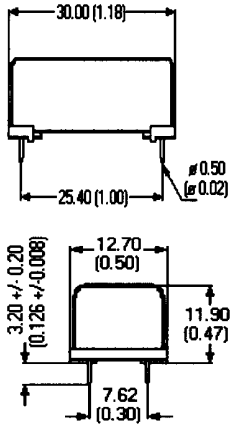
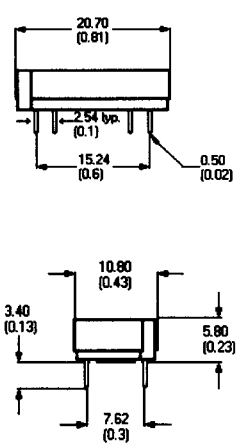
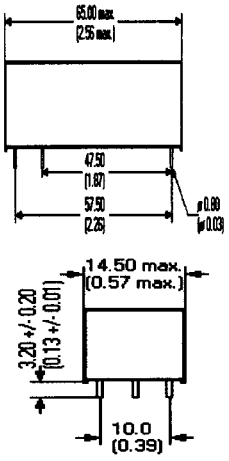
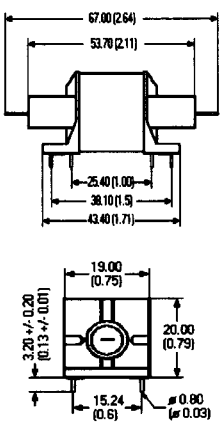
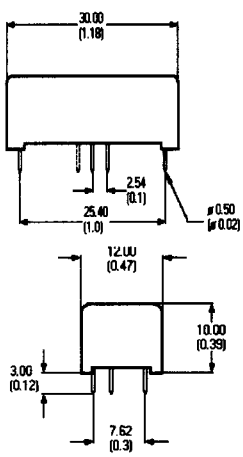
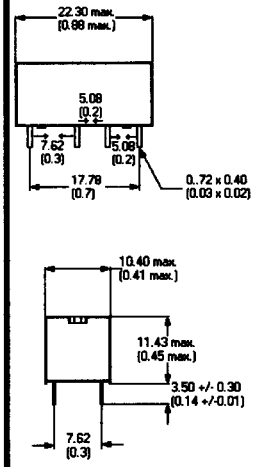
Products for tomorrow...

	 **B Series** Standard Relay for telecom and test systems	 **BE Series** Relays with up to 5 form A, 1-2 form C, 1-2 bist. form A contacts	 **BT Series** Low thermal Reed Relays	 **CL Series** Reed Relays for Loop Current Detection
DIMENSIONS *Tolerance 0.10 mm (0.004 in)* **valid for versions with metal case*		 **will increase for multi-pole dimensions		
FEATURES	Metal or plastic case High coil resistance Many switch options Reliable for difficult loads Many BABT approved versions available	Metal or plastic case Several pin out options Low thermal version available Dry/mercury wetted versions available High insulation versions available	Low thermal voltage Switch low microvolt levels	Sealed with UL listed epoxy Magnetic shielding High reliability BABT approved according to EN60950 Versions with low coil resistance available 1 & 2 coil versions available
APPLICATIONS	Ideal for many battery-driven systems Telecommunications	Telecommunications Medical equipment Test and measurement General applications	Test, measurement, & control technology High-precision measuring devices Recorder input Change-over switching	Line sensing for telecommunication devices
SPECS				
Coil voltage (VDC)	5, 12, 24, 48	5, 6, 12, 24	5, 12, 24	line sense (15 ma max)
Coil Resistance (Ω)	140-10,000	140 - 7845	900 - 25,000	4 - 25
Contact style	1A, 1C	1/2(A,B,C,E) 3A, 4A, 5A	2A	1A
Operating temp (^{0}C)	-20 / 70	-20 / 70	-20 / 70	-20 / 70
Storage temp (^{0}C)	-25 / 85	-40 / 105	-40 / 105	-25 / 85
Operating time (µs)	500 - 2500	500 - 2500	800	500
Release time (µs)	300 - 2000	200 - 1000	100	200
Rated power (Watts)	3 - 50	3 - 50	10	5 - 10

 **DIL-CL Series** Reed Relays for Loop Current Detection	 **HE Series** High-Power and High-Voltage Reed Relays	 **HF Series** High-Frequency and high power Reed Relays	 **MT Series** Bistable Reed Relays	 **TC Series** Electro-mechanical Relays with 2 change-over switches
DIMENSIONS 	 Other pin-outs available			
FEATURES Pull-in current at <15ma available BABT approved according to EN60950 Flat version w/ 5.8 mm UL approval	Available with external contact blades 1-2 form A, 1 form B, or 1 form C switches available Suitable for switching high voltages	Patented complete encapsulation of the relay coil External electrostatic and magnetic shields Special copper-plated form A switches Suitable for carrying a high current, up to 5A at 30 MHz	No power consumption between switching Low required switching power CMOS gate driven 4.0 kVDC isolation voltage 1 or 2 coils available Dry or HG-wet form A or form C switches	UL and CSA approval 16 pin DIL socket Low coil power consumption Low cost Washable Coil voltages available from 5 up to 48 VC Fully sealed Suitable for soldering equipment
APPLICATIONS Line sensing for many telecommunications devices	High-voltage test sets Cable testers Medical equipment (RF surgery)	Radio frequency technology Antenna tuning units	Battery-powered or low current devices	Telecommunications Instrumentation

SPECS

Coil voltage (VDC)	15 ma max.	6, 12, 24, 48	5, 12, 24	5	5, 6, 9, 12, 24, 48
Coil Resistance (Ω)	9 - 18	40 - 7700	30 - 1000	1550 - 10,000	125 - 11520
Contact style	1A	1A, 1B, 2A	1A, 1B	1A, 1C	2C
Operating temp (°C)	-20 / 70	-20 / 70	-40 / 85	-20 / 70	-25 / 70
Storage temp (°C)	-25 / 85	-35 / 105	-40 / 105	-25 / 85	-40 / 85
Operating time (µs)	500	2500 - 6000	3500	500 - 3000	10,000
Release time (µs)	100	2000	2000	2000	10,000
Rated power (Watts)	5	50	25	1 - 35	60 - 120

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