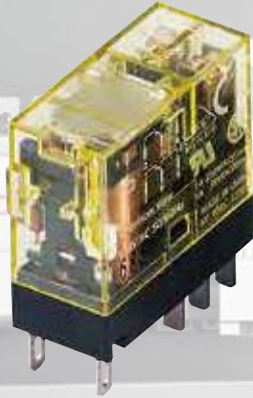
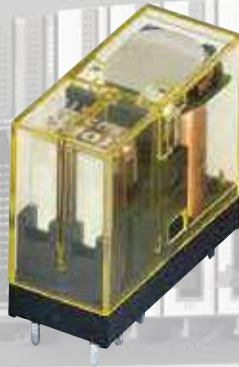


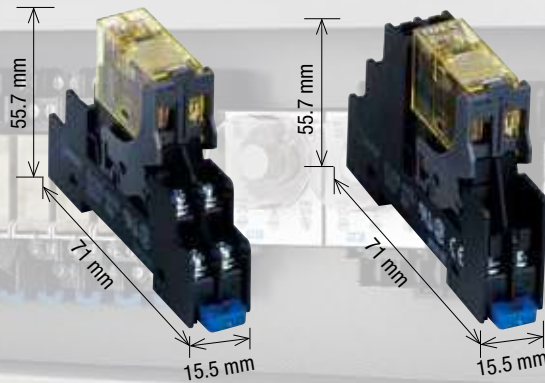
•RJ22S Plug-in Terminal



•RJ22V PC Board Terminal



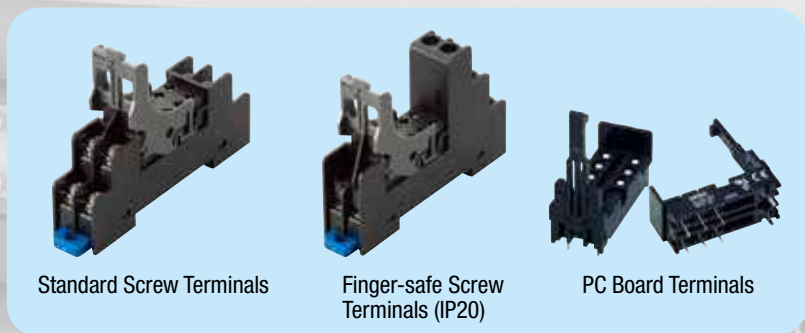
When mounted in a socket



High contact reliability with bifurcated contacts



2-pole SJ sockets



RJ Series Slim Power Relay Plug-in Terminal (bifurcated contacts)

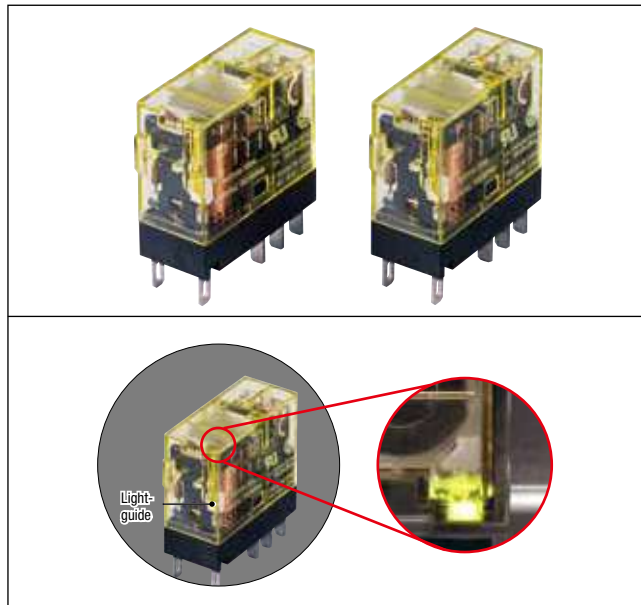
High contact reliability with bifurcated contacts (minimum applicable load: 1V DC, 100μA)

- The smallest width for 2-pole/bifurcated contacts relay (based on IDEC research as of July 2017)
- Non-polarized green LED indicator available (except for simple type)
- IDEC's unique light-guide structure enables an RJ relay to be identified by the illuminating LED.
- Diode, reverse polarity diode, and RC circuits are available.
- Peak inverse voltage is 1000V.
- UL recognized, CSA certified, VDE approved, EN compliant.

Applicable Standards



- See website for details on approvals and standards.



Relays

Bifurcated Contacts

Type	2-pole (bifurcated contacts DPDT)	
	Part No. (Ordering No.)	Coil Voltage Code
Standard (with LED indicator)	RJ22S-CL-*	A12, A24, A110, A115, A120, A220, A230, A240, D5, D6, D12, D24, D48, D100
Simple (without LED indicator)	RJ22S-C-*	
With diode (with LED indicator)	RJ22S-CLD-*	
With diode (without LED indicator)	RJ22S-CD-*	
With diode Reverse polarity (with LED indicator)	RJ22S-CLD1-*	
With diode Reverse polarity (without LED indicator)	RJ22S-CD1-*	
With RC circuit (with LED indicator)	RJ22S-CLR-*	
With RC circuit (without LED indicator)	RJ22S-CR-*	

Coil Voltage Code

Code	Voltage
A12	12V AC
A24	24V AC
A110	110V AC
A115	115V AC
A120	120V AC
A220	220V AC
A230	230V AC
A240	240V AC
D5	5V DC
D6	6V DC
D12	12V DC
D24	24V DC
D48	48V DC
D100	100-110V DC

Contact Ratings

Allowable Contact Power		Rated Load			Allowable Switching Current	Allowable Switching Voltage	Minimum Applicable Load (Note)
Resistive Load	Inductive Load	Voltage	Resistive Load	Inductive Load $\cos\phi=0.4$ L/R=7ms			
250VA AC 30W DC	100VA AC 15W DC	250V AC	1A	0.4A	1A	250V AC 125V DC	1V DC 100μA (reference value)
		30V DC	1A	0.5A			

Note: Measured at operating frequency of 120 operations per minute (failure rate level P, reference value)

Ratings

Voltage	UL Ratings				CSA Ratings						VDE Ratings	
	Resistive		General Use		Resistive		Inductive		General Use		Resistive	
	NO	NC	NO	NC	NO	NC	NO	NC	NO	NC	NO	NC
250V AC	—	—	1A	1A	—	—	—	—	1A	1A	1A	1A
30V DC	1A	1A	—	—	1A	1A	1A	1A	—	—	1A	1A

Coil Ratings

Rated Voltage (V)	Coil Voltage Code	Without LED Indicator			With LED Indicator			Operating Characteristics (against rated values at 20°C)			Power Consumption
		Rated Current (mA) ±15% (at 20°C)		Coil Resistance (Ω) ±10% (at 20°C)	Rated Current (mA) ±15% (at 20°C)		Coil Resistance (Ω) ±10% (at 20°C)	Pickup Voltage (initial value)	Dropout Voltage (initial value)	Maximum Continuous Applied Voltage (Note)	
		50Hz	60Hz		50Hz	60Hz					
AC 50/60 Hz	12V A12	87.3	75.0	62.5	91.1	78.8	62.5	80% maximum	30% minimum	140%	Approx. 1.1VA (50Hz) 0.9 to 1.2VA (60Hz)
	24V A24	43.9	37.5	243	47.5	41.1	243				
	110V A110	9.6	8.2	5,270	9.5	8.1	5,270				
	115V A115	9.1	7.8	6,030	9.0	7.7	6,030				
	120V A120	8.8	7.5	6,400	8.7	7.4	6,400				
	220V A220	4.8	4.1	21,530	4.8	4.1	21,530				
	230V A230	4.6	3.9	24,100	4.6	3.9	24,100				
240V A240	4.3	3.7	25,570	4.3	3.7	25,570					
DC	5V D5	106		47.2	110		47.2	70% maximum	10% minimum	170%	Approx. 0.53 to 0.64W
	6V D6	88.3		67.9	92.2		67.9				
	12V D12	44.2		271	48.0		271				
	24V D24	22.1		1,080	25.7		1,080				
	48V D48	11.0		4,340	10.7		4,340				
	100-110V D100	5.3-5.8		18,870	5.2-5.7		18,870			160%	

Note: Maximum continuous applied voltage is the maximum voltage that can be applied to relay coils.

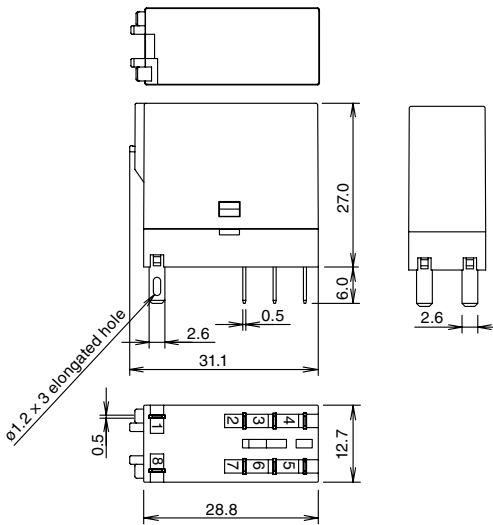
Specifications

Relay	RJ22S	
Number of Poles	2-pole	
Contact Configuration	DPDT (bifurcated contacts)	
Contact Material	AgNi (gold clad)	
Degree of Protection	IP40	
Contact Resistance (initial value)	50 mΩ maximum (measured using 5V DC, 1A voltage drop method)	
Operating Time (at 20°C)	15 ms maximum (at the rated coil voltage, excluding contact bounce time) With diode or RC: 20 ms maximum	
Release Time (at 20°C)	10 ms maximum (at the rated coil voltage, excluding contact bounce time) With diode or RC: 20 ms maximum	
Impulse Withstand Voltage	10,000V AC (between contact and coil)	
Insulation Resistance	100 MΩ minimum (500V DC megger)	
Dielectric Strength	Between contact and coil	5,000V AC, 1 minute
	Between contacts of the same pole	1,000V AC, 1 minute
	Between contacts of the different poles	3,000V AC, 1 minute
Vibration Resistance	Operating Extremes	10 to 55 Hz, amplitude 0.75 mm
	Damage Limits	10 to 55 Hz, amplitude 0.75 mm
Shock Resistance	Operating Extremes	NO contact: 200 m/s ² , NC contact: 100 m/s ²
	Damage Limits	1,000 m/s ²
Electrical Life	AC load: 100,000 operations minimum (operating frequency 1,800 per hour) DC load: 200,000 operations minimum (operating frequency 1,800 per hour)	
Mechanical Life	AC load: 10 million operations minimum (operating frequency 18,000 operations per hour) DC load: 20 million operations minimum (operating frequency 18,000 operations per hour)	
Operating Temperature (100% rated voltage)	-40 to +70°C (no freezing)	
Operating Humidity	5 to 85%RH (no condensation)	
Storage Temperature	-40 to +85°C (no freezing)	
Storage Humidity	5 to 85%RH (no condensation)	
Weight (approx.)	19g	

Applicable Sockets

Style	Part No.	Ordering No.	Package Quantity
Standard Screw Terminal	SJ2S-05B	SJ2S-05B	1
Finger-safe Screw Terminal	SJ2S-07L	SJ2S-07L	1
PC Board Terminal	SJ2S-61	SJ2S-61PN10	10
	SJ2S-61	SJ2S-61PN50	50

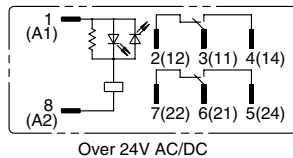
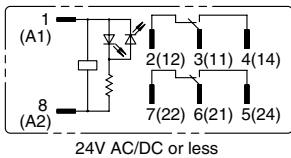
Dimensions



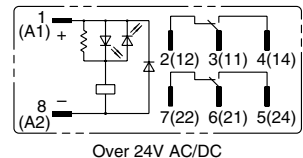
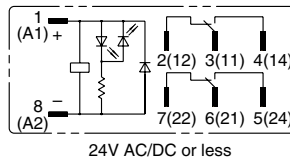
All dimensions in mm.

Internal Connection (bottom view)

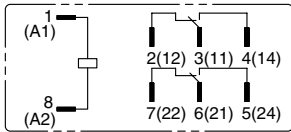
RJ22S-CL-* Standard (with LED indicator)



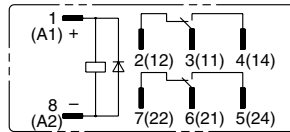
RJ22S-CLD1-* With diode/reverse polarity (with LED indicator)



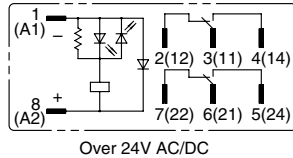
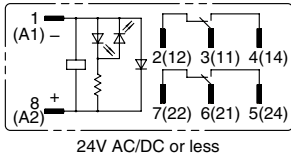
RJ22S-C-* Simple



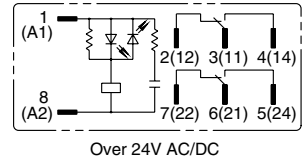
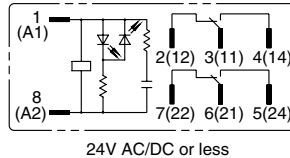
RJ22S-CD1-* With diode/reverse polarity



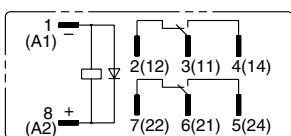
RJ22S-CLD-* With diode (with LED indicator)



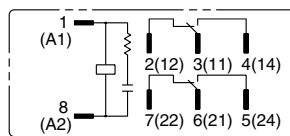
RJ22S-CLR-* With RC (with LED indicator)



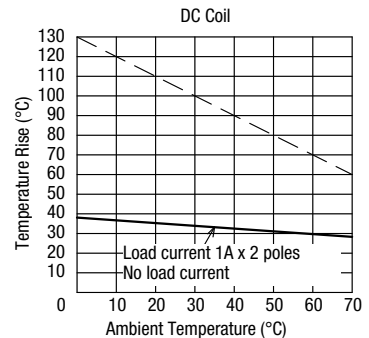
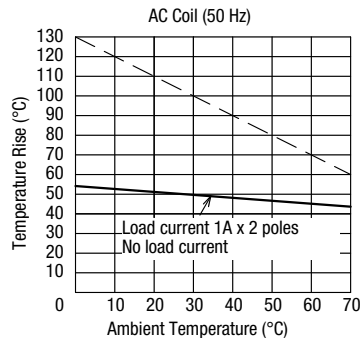
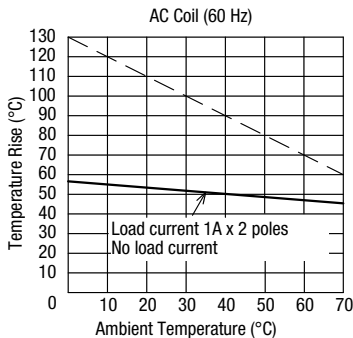
RJ22S-CD-* With diode



RJ22S-CR-* With RC



Operating Temperature and Coil Temperature Rise



- The slanted dashed line indicates the allowable temperature rise for the coil at different ambient temperatures.
- The above temperature rise curves show the characteristics when 100% of the rated coil voltage is applied.