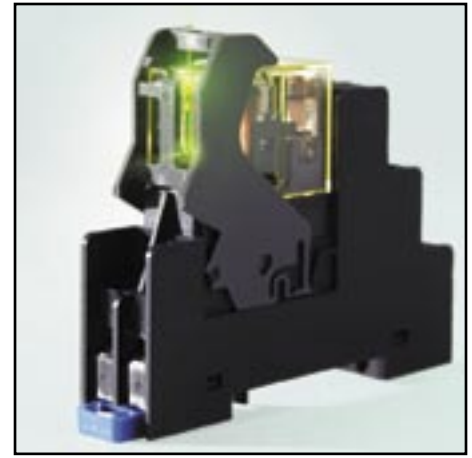




# RJ Series Relays

- Features**
- Compact size: 12.7 x 27 x 28.8 mm
  - Contact rating: 8A (DPDT), 12A (SPDT)
  - Operational life: 200K cycles at full resistive load; 50 million cycles, no load
  - Optional, green, non-polarized LED
  - RoHS compliant

RJ relays, the newest addition to our relay family, were designed with the same attention-to-detail IDEC is known for. One feature that exemplifies this is an optional LED. It uses a unique light guide to give you a brighter and more noticeable status indicator from multiple directions.



## Specifications

			RJ1S	RJ2S					
General information	No. of poles		1	2					
	Contact Configuration		SPDT	DPDT					
	Contact Rating		12A	8A					
	Contact Material		Silver-Nickel alloy						
	Contact Resistance		50 milliohms max						
	Operating Time		15 ms max						
	Release Time		10 ms max						
	Dielectric Strength	Between contact and coil Between contacts	5,000VAC, 1 minute 1,000VAC, 1 minute						
	Vibration Resistance	Damage limits Operating extremes	10-55Hz, amplitude 0.75mm 10-55Hz, amplitude 0.75mm						
	Shock Resistance	Damage limits Operating extremes	100m/s <sup>2</sup> min (10G) 1,000m/s <sup>2</sup> min (100G)						
	Mechanical Life	AC DC	30,000,000 operations 50,000,000 operations						
	Electrical Life @ Full Rated Load	AC DC	200,000 operations 100,000 operations						
	Operating Temperature		-40 to 70° C						
	Operating Humidity		5 to 85% RH						
Dimensions (H x W x D mm)		12.7 x 27 x 28.8							
Weight (Approx.)		19g							
Contact Ratings	Contact Load Ratings	Resistive Load (Max)	NO Contact	12A @ 250VAC/30VDC	8A @ 250VAC/30VDC				
			NC Contact	12A @ 250VAC; 6A @ 30VDC	8A @ 250VAC; 4A @ 30VDC				
		Inductive Load (Max)	NO Contact	7.5A @ 250VAC; 6A @ 30VDC	4A @ 250VAC; 4A @ 30VDC				
			NC Contact	7.5A @ 250VAC; 3A @ 30VDC	4A @ 250VAC; 2A @ 30VDC				
	Min Applicable Load (reference value)		100mA @ 5VDC		10mA @ 5VDC				
	Contacts Max Power Allowed	Resistive Load (Max)	NO Contact	AC: 3,000VA; DC: 360W	AC: 2,000VA; DC: 240W				
			NC Contact	AC: 3,000VA; DC: 180W	AC: 2,000VA; DC: 120W				
Inductive Load (Max)		NO Contact	AC: 1,875VA; DC: 180W	AC: 1,000VA; DC: 120W					
		NC Contact	AC: 1,875VA; DC: 90W	AC: 1,000VA; DC: 60W					
Coil Ratings	DC Coil	Nominal Voltage	12V	48mA	271Ω	0.53W	70% Max	10% Min	170%
		Nominal Current	24V	25.7mA	1,080Ω				
		Coil Resistance	100-110V	5.2-5.7mA	18,870Ω				
	AC Coil (60Hz)	Nominal Voltage	24V	41.1mA	243Ω	0.9VA	80% Max	30% Min	140%
		Nominal Current	120V	8.1mA	5,270Ω				
		Coil Resistance	240V	4.1mA	21,530Ω				
		Power Consumption							
Pull-in Voltage									
Drop-Out Voltage									
Max Allowable Voltage									

Specifications con't on following page

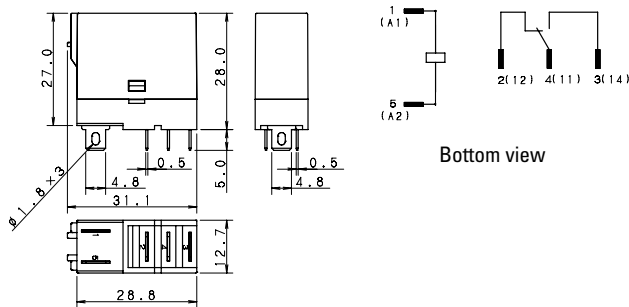
		SJ1S	SJ2S
<b>Sockets</b>	Rated Insulation Voltage	250V AC/DC	
	Applicable Wire	Max up to 2 - #14 AWG	
	Applicable Crimping Terminal	2mm <sup>2</sup> x 2	
	Screw Size	M3 Slotted-Phillips screw	
	Weight	30g	34g

## Ordering Information

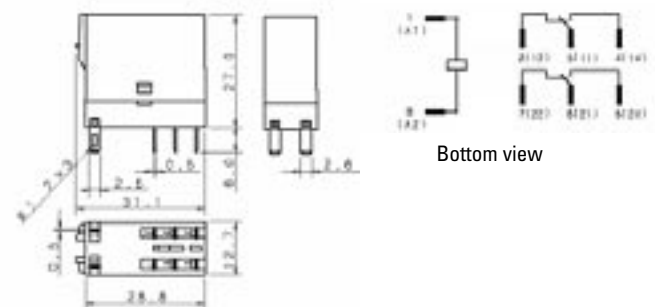
R J    S - C    -   

Contact Configuration	Options	Coil Voltage
1 - SPDT 2 - DPDT	Blank - Standard L - LED	D12 - 12VDC; D24 - 24VDC; D100 - 100-110VDC; A24 - 24VAC; A120 - 120VAC; A240 - 240VAC

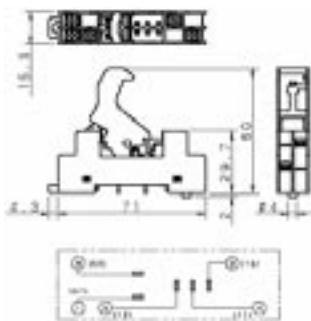
## RJ1S Dimensions



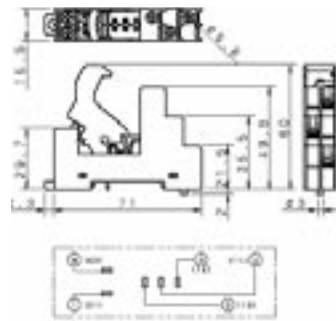
## RJ2S Dimensions



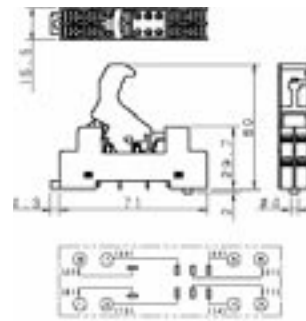
## SJ1S-05B Dimensions



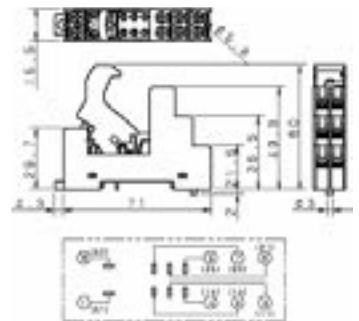
## SJ1S-07L Dimensions



## SJ2S-05B Dimensions



## SJ2S-07L Dimensions



For more information on these and other IDEC relays, visit:

[www.idec.com/relay](http://www.idec.com/relay)

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800-262-IDECE (4332)  
1175 Elko Drive • Sunnyvale, CA 94089  
Fax: 408-745-5258 • [www.idec.com](http://www.idec.com)

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Catalog No. RJ9Y-DS100-0 06/05 10K

Accessory part numbers	Description
SJ1S-05B	SPDT Standard Screw Terminal
SJ1S-07L	SPDT Finger-safe Screw Terminal
SJ2S-05B	DPDT Standard Screw Terminal
SJ2S-07L	DPDT Finger-safe Screw Terminal