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Jameco Part Number 496827



## RKS series

### 5 TO 20 AMP PC BOARD MINIATURE RELAY

Meets VDE 8mm spacing, 4kV dielectric

File E22575

File LR15734-173

VDE-Reg. Nos. 3436, 3437, 3491

IMC Approved - Working Class C  
All or nothing electrical relay.

#### FEATURES

- SPST through DPDT contact arrangements.
- Immersion cleanable<sup>§</sup>, tape sealed plastic case.
- Meets VDE 8mm spacing, 4kV dielectric, coil to contacts.
- Conforms to VDE 0435, 0631, 0700 and 0806.
- Meets IEC 65 regulatory requirements.
- UL Class B coil insulation system.

<sup>§</sup> For additional details, refer to application note 13C265,  
"Mounting, Termination and Cleaning of PC Board Relays."

#### CONTACT DATA @ 25°C

Arrangements: 1 Form A (SPST-NO), 1 Form B (SPST-NC), 1 Form C (SPDT), 2 Form A (DPST-NO) and 2 Form C (DPDT).

Material: Silver-cadmium oxide.

Expected Mechanical Life: 10 million operations.

#### CONTACT RATINGS @ 25°C

Code	Arrangement	UL/CSA/VDE Ratings	Expected Life (Operations)
G & X	SPST or SPDT	10A @ 250VAC 10A @ 277VAC/30VDC 360VA @ 240VAC, Pilot Duty	100,000
		1/3 HP @ 250VAC 1/4 HP @ 120VAC	
		21.6 LRA, 10 FLA @ 240VAC 30 LRA, 10 FLA @ 125VAC	30,000
		3A Tungsten @ 120VAC (TV-3)	25,000
		10A @ 277VAC 10A @ 30VDC	50,000
	DPST-NO or DPDT	1/4 HP @ 240VAC 360VA @ 240VAC, Pilot Duty	
		1/8 HP @ 120VAC	
G Only	SPST or SPDT	5A Tungsten @ 120VAC (TV-5)	25,000
W	SPST or SPDT	20A @ 277VAC/24VDC	20,000
		16A @ 250VAC 16A @ 277VAC/24VDC	50,000
		12A @ 250VAC 12A @ 277VAC/24VDC	100,000
		1 HP @ 240VAC 1/2 HP @ 120VAC	
		48 LRA, 8 FLA @ 240VAC 58.8 LRA, 16 FLA @ 120VAC	30,000
		5A Tungsten @ 120VAC (TV-5)	25,000

#### INITIAL DIELECTRIC STRENGTH

Between Open Contacts: 1,000V rms.

Between Adjacent Contacts: 2,500V rms.

Between Contacts and Coil: 4,000V rms.

#### COIL DATA @ 25°C

Voltage: 5 to 110VDC.

Maximum Power @ 25°C: 1.6W.

Nominal Power @ 25°C: 520mW, approx.

Temperature Rise: 64°C per Watt.

Maximum Temperature Per UL508: Class B insulation: 130°C.

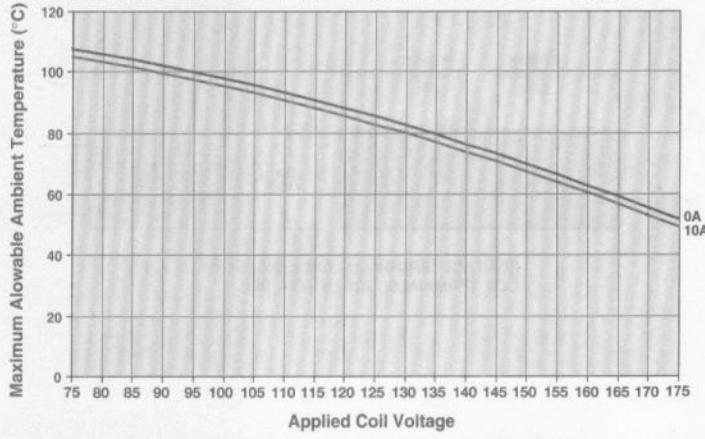
Duty Cycle: Continuous.

Initial Insulation Resistance: 100 megohms, min., at 25°C, 500VDC and 50% rel. humidity.

#### COIL DATA @ 25°C

	Nominal Voltage	DC Resistance in Ohms ±10%	Must Operate Voltage	Nominal Coil Current (mA)
DC Coils	5	47	3.6	106
	6	69	4.3	87
	9	155	6.5	58
	12	275	8.6	44
	18	620	13.0	29
	24	1,100	17.3	22
	48	4,400	34.6	11
	60	6,880	43.2	9
	110	23,100	79.2	5

#### MAXIMUM AMBIENT TEMPERATURE VS. COIL VOLTAGE



#### OPERATE DATA @ 25°C

Must Operate Voltage: 72% of nom. voltage or less.

Operate Time (Excluding Bounce): 15 ms, typ., at nom. voltage.

Release Time (Excluding Bounce): 5 ms, typ., at nom. voltage.

#### ENVIRONMENTAL DATA

Temperature Range:

Storage: -40°C to +130°C.

Operating: -40°C to +85°C.

#### MECHANICAL DATA

Termination: Printed circuit terminals.

Enclosures: Immersion cleanable, tape sealed plastic case.

Weight: 0.65 oz. (18.5 g) approximately.

## ORDERING INFORMATION

Typical Part Number ➤

RKS

-5

D

W

-12

### 1. BASIC SERIES:

RKS = Miniature, printed circuit board relay with immersion cleanable case.

### 2. CONTACT ARRANGEMENT:

1 = 1 Form A (SPST-NO)	5 = 1 Form C (SPDT)	11 = 2 Form C (DPDT)
2 = 1 Form B (SPST-NC)	7 = 2 Form A (DPST-NO)	

### 3. COIL INPUT:

D = DC voltage.

### 4. CONTACT RATING & WIRING / PC BOARD LAYOUT DIAGRAM CODES:

G = 10 amps, diagram code 1 for 1 pole models.

X = 10 amps, diagram code 2 for 1 pole models.

10 amps, diagram code 4 for 2 pole models.

10 amps, diagram code 5 for 2 pole models.

W = 20 amps, diagram code 3.

Note: See diagrams below.

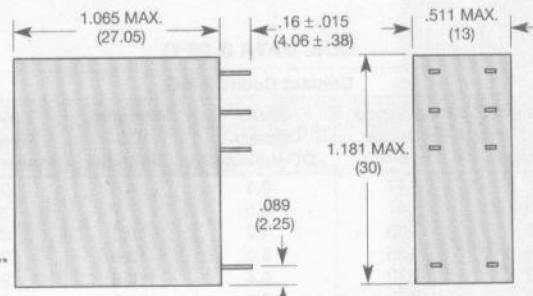
### 5. COIL VOLTAGE:

05 = 5VDC	09 = 9VDC	18 = 18VDC	48 = 48VDC	110 = 110VDC
06 = 6VDC	12 = 12VDC	24 = 24VDC	60 = 60VDC	

## STOCK ITEMS - The following items are normally maintained in stock for immediate delivery.

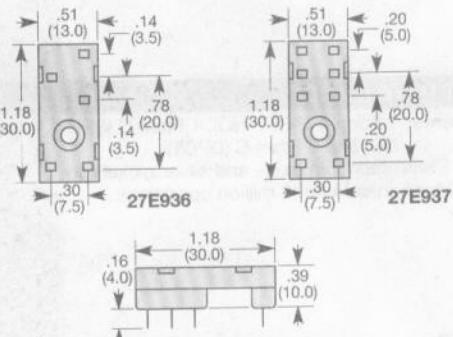
RKS-1DG-12	RKS-5DG-05	RKS-5DW-24	RKS-11DG-24
RKS-1DG-24	RKS-5DG-12	RKS-5DW-48	RKS-11DX-05
RKS-1DW-12	RKS-5DG-24	RKS-5DX-12	RKS-11DX-12
RKS-1DW-18	RKS-5DG-48	RKS-5DX-48	RKS-11DX-18
RKS-1DW-24	RKS-5DW-05	RKS-7DX-24	RKS-11DX-24
RKS-1DX-24	RKS-5DW-12	RKS-11DG-12	RKS-11DX-48

## OUTLINE DIMENSIONS

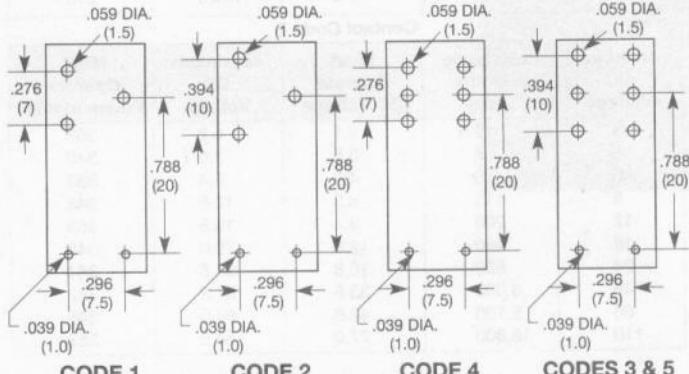


\*\* Recommend tape tab be punctured or removed before relay is put in service.

## RK PC BOARD SOCKETS



## PC BOARD LAYOUTS (Bottom Views)



CODE 1

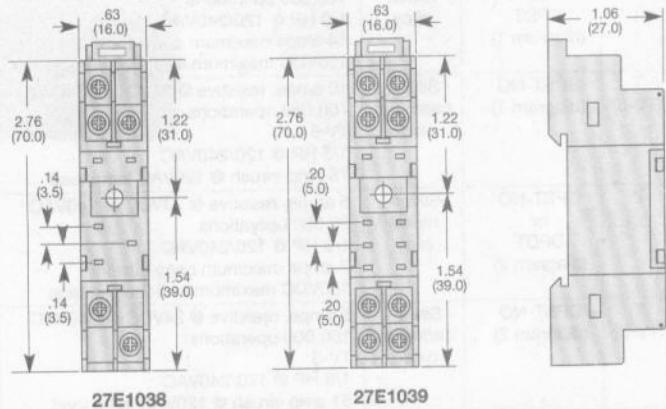
CODE 2

CODE 4

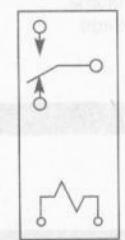
CODES 3 & 5

Note: On single throw models, only necessary terminals are present.

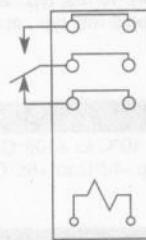
## RK SCREW TERMINAL SOCKETS



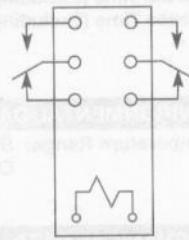
## WIRING DIAGRAMS (Bottom Views)



CODES 1 & 2



CODE 3



CODES 4 & 5

Note: On single throw models, only necessary terminals are present.

## RK HOLD DOWN SPRING



20C418

Note: Sockets UL approved for Class A insulation.