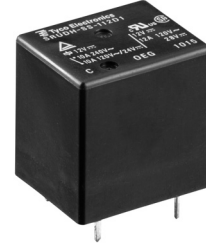


Miniature PCB Relay SRU Series

- Up to 12A switching capacity
- 1 form A (NO) and 1 form C (CO) contacts
- Flux proof, wash tight version available

Typical applications
Appliances, HVAC, office machines



Approvals

UL E58304, TUV R50137369
Technical data of approved types on request

Contact Data

Contact arrangement	1 form A (NO), 1 form C (CO)
Rated voltage	240VAC, 28VDC
Max. switching voltage	240VAC, 28VDC
Rated current	12A
Contact material	AgCdO, AgSnO ₂ , AgSnOInO
Min. recommended contact load	100mA at 5VDC
Frequency of operation	360 ops./h
Operate/release time max.	10/5ms

Electrical endurance

Type	Contact	Load	Operations
SRUDH		10A, 240VAC/24VDC res, -30 to +80°C	100x10 ³
SRUUH	AgCdO	12A, 240VAC/24VDC res, -30 to +80°C	100x10 ³
SRUUH	AgSnOInO	15A, 250VAC res, 50x10 ³	
SRUUH	AgSnOInO	28VDC, 12A res, -30 to + 80°C,	100x10 ³

Contact ratings	12A
Mechanical endurance, DC coil	5x10 ⁶ operations

Coil Data

Coil voltage range	3 to 48VDC
Operative range, IEC 61810	1
Coil insulation system according UL	Class F

Coil Data (continued)

Coil versions, DC coil

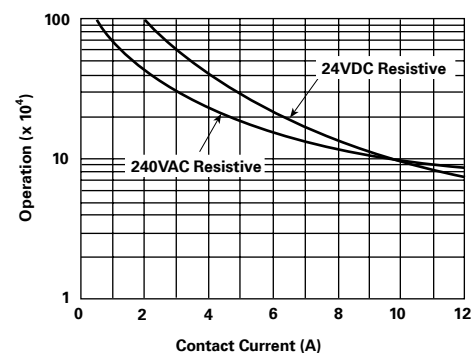
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
003	3	2.25	0.15	25	360
005	5	3.75	0.25	70	360
006	6	4.50	0.30	100	360
009	9	6.75	0.45	225	360
012	12	9.00	0.60	400	360
018	18	13.50	0.90	900	360
024	24	18.00	1.20	1600	360
048	48	36.00	2.40	4500	510

All figures are given for coil without pre-energization, at ambient temperature +23°C.

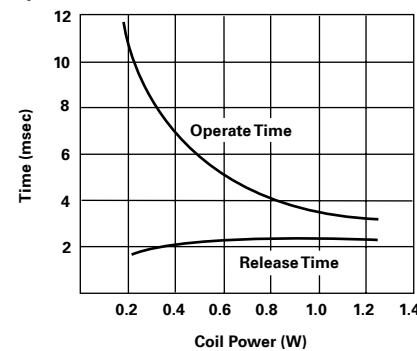
Insulation Data

Initial dielectric strength	
between open contacts	750V _{rms}
between contact and coil	1500V _{rms}
Clearance/creepage	
between contact and coil	>1.6/3.2mm

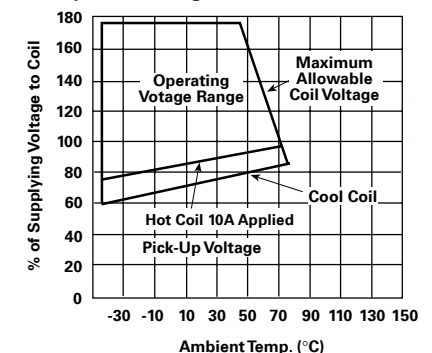
Electrical endurance



Operate time



Coil operative range



Part Number **SRUDH -SS -1 12 D M 1 ,000**
 General Purpose Relays
 PCB Relays

OEG

OEG Catalog 130
 Issued 3-03 (PDF)

Typical Part Number **SRUDH -SS -1 12 D M 1 ,000** Ordering Information (Continued) Typical Part Number **SRUDH -SS -1 12 D M 1 ,000**

elay.

Other Data

48VDC	Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter
	Ambient temperature -30°C to +80°C
	Category of environmental protection RTII - flux proof
48 = 48VDC IEC 61810	Form A, SPST-NO
	Shock resistance (functional) 10g
	Shock resistance (destructive) 100g
	Weight 12g
Form 1 Form A, SPST-NO	Resistance to soldering heat THT RTII: 270°C/10s
	RTIII: 260°C/5s
	Packaging/unit tube/25 pcs., carton box/1000 pcs.

likely to maintain the following items in stock for immediate delivery.

ix = custom model

,000

more likely to maintain the following items in stock for immediate delivery.

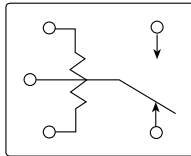
- 1. Basic Series:**
SRUDH = Miniature Power PC board relay.
- 2. Enclosure:**
SS = Vent (Flux-tight)* plastic cover.
SH = Sealed, plastic case.
- 3. Termination:**
1 = 1 pole
- 4. Coil Voltage:**
06 = 6VDC 12 = 12VDC 48 = 48VDC
09 = 9VDC 24 = 24VDC
- 5. Coil Input:**
D = Standard
- 6. Contact Arrangement:**
Blank = 1 Form C, SPDT M = 1 Form A, SPST-NO
- 7. Contact Material:**
1 = AgCdO
- 8. Suffix:**
,000 = Standard model Other Suffix = Custom model

* Not suitable for immersion cleaning processes.

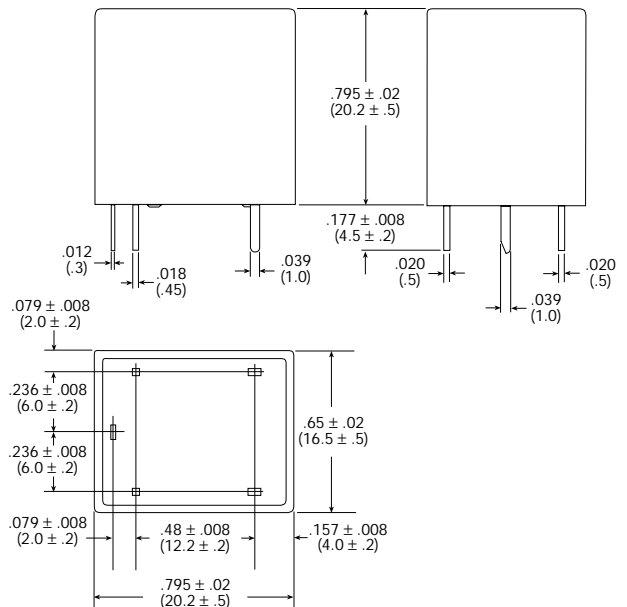
SRUDH-SH-112DM1,000
 SRUDH-SH-124DM1,000

Terminal assignment

Bottom view on solder pins



Dimensions



.020
(.5)

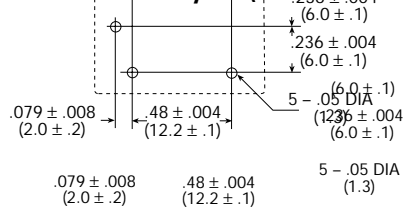
.039
(1.0)

PCB layout

Bottom view on solder pins

PC Board Layout (Bottom View)

PC Board Layout (Bottom View)



Recognized for US and
 layout as relay.

UL Recognized for US and
 board layout as relay.

MAX.
(.5)

20C430 spring is designed to secure SRUDH relay in 27E1064 socket.

20C430 spring is designed to secure SRUDH relay in 27E1064 socket.

27E1064 socket is rated 10A @ 300VAC. UL Recognized for US and Canada. Designed to fit same suggested board layout as relay.

.167 MAX.
(4.25)

.916 MAX.
(23.35)

.270 MAX.
(6.85)

.660 MAX.
(16.75)

s are in inches over
 s) unless otherwise
 dimensions are in
 millimeters) unless
 specified.

Specifications and availability
 subject to change.

Datasheets and product specification
 subject to change to IEC 61810-1 and to be used
 only together with the 'Definitions' section.

www.tycoelectronics.com
 Technical support:

is subject to the
 terms and conditions
 of the 'Definitions' section,
 available at
<http://relays.te.com/definitions>

Datasheets, product data, 'Definitions' section,
 application notes and all specifications
 are subject to change
 (millimeters) unless otherwise
 specified.

Miniature PCB Relay SRU Series (Continued)

Product code structure	Typical product code	SRUDH	-SS	-1	12	D	M	1	F	,000
Type	SRUDH Miniature PCB Relay SRU series									
Enclosure	SS Flux proof SH Immersion cleanable case with knock-off nib									
Number of poles	1 1 pole									
Coil voltage	Coil code: please refer to coil versions table (e.g. 05=5VDC)									
Coil input	D Standard									
Contact arrangement	Blank 1 form C (CO) contact M 1 form A (NO) contact									
Contact material	1 AgCdO 2 AgSnO ₂ 4 AgSnOInO									
UL insulation system	Blank UL Class A F UL Class F									
Suffix	,000 Standard									

Other types on request

Product code	Enclosure	Coil	Arrangement	Cont.material	Insulation	Part number
SRUDH-SH-106D1,000	Wash tight	6VDC	1 form C (CO)	AgCdO	Class A	7-1419126-7
SRUDH-SH-112D1,000		12VDC				8-1419126-1
SRUDH-SH-112DM1,000			1 form A (NO)			8-1419126-4
SRUDH-SH-124D1,000		24VDC	1 form C (CO)			1440003-7
SRUDH-SH-124DM1,000			1 form A (NO)			9-1419126-0
SRUDH-SH-124DM1F,F000					Class F	1440003-8
SRUDH-SH-148D1,000		48VDC	1 form C (CO)		Class A	9-1419126-4
SRUDH-SS-105D1,000	Flux proof	5VDC				9-1419126-7
SRUDH-SS-109D1,000		9VDC				1419127-3
SRUDH-SS-112D1,000		12VDC				1-1419127-2
SRUDH-SS-112DM1,000			1 form A (NO)			1-1419127-6
SRUDH-SS-112DM2F,00000				AgSnO	Class F	2071054-5
SRUDH-SS-124D1,000		24VDC	1 form C (CO)	AgCdO	Class A	2-1419127-3
SRUUH-SH-112D1,000	Wash tight	12VDC				1-1461759-0
SRUUH-SH-112DM4,000			1 form A (NO)	AgSnOInO		1-1649406-0
SRUUH-SH-124DM4,000		24VDC				1-1649406-1
SRUUH-SS-112D1F,000	Flux proof	12VDC	1 form C (CO)	AgCdO	Class F	1649501-4
SRUUH-SS-112D4,000				AgSnOInO	Class A	1649408-4
SRUUH-SS-124D4,000		24VDC				1649408-5
SRUUH-SS-124DM4,000			1 form A (NO)			1649406-5