

### Miniature Power PCB RYII & RYII Reflow Solderable

- 1 pole 8A, 1 form C (CO) or 1 form A (NO) or 1 form B (NC) contact
- Low component height 12.3mm
- 5kV/8mm coil-contact
- Reinforced insulation (protection class II)
- Pinnings: 3.2mm and 5mm
- **■** Reflow-solderable version
- **■** Especially suitable for resistive and inductive loads on form A (NO) and form B (NC) contacts
- Plastic materials according to IEC 60335-1 (domestic appliances)

Typical applications

heating control, interface technology, domestic appliances, timers, temperature control



E0142-E

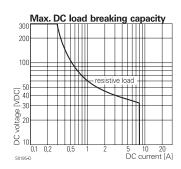


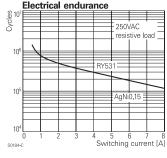
Approvals
VDE Cert. No. 40009639, UL E214025
Technical data of approved types on request

Contact Data			
Contact arrangement	1 form C (CO) or		
	1 form A (NO) or		
	1 form B (NC)		
Rated voltage	250VAC		
Max. switching voltage	400VAC		
Rated current	8A		
Breaking capacity max.	2000VA		
Contact material	AgNi0.15, AgSnO <sub>2</sub>		
Frequency of operation, with/without load	6/1200min <sup>-1</sup>		
Operate/release time max.	9/5ms		
Bounce time max., form A/form B	6/10ms		

antaat ratings

Contact ratings					
Туре	Contact	Load	Cycles		
IEC6181	10				
RY531	A (NO)	8A, 250VAC, 70°C	100x10 <sup>3</sup>		
RY211	A (NO)	8A, 250VAC, 70°C	75x10 <sup>3</sup>		
RY211	B (NC)	8A, 250VAC, 70°C	$50x10^3$		
UL508					
RY211	A/B (NO/NC)	10A, 250VAC, general purpose, 70°C	$30x10^3$		
RY211	A (NO)	1/2hp, 240VAC, 85°C	30x10 <sup>3</sup>		
RY211	A/B (NO/NC)	B300, 70°C	6x10 <sup>3</sup>		
EN6073	EN60730-1				
RY211	A/B (NO/NC)	6(4)A, 250VAC, 85°C	100x10 <sup>3</sup>		
RY211	A (NO)	8(4)A, 250VAC, 75°C	100x10 <sup>3</sup>		
Mechanical endurance, DC coil 30x10 <sup>6</sup> operations					

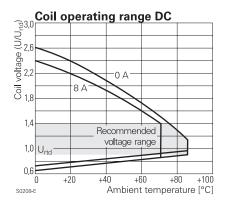




Coil Data	
Coil voltage range	5 to 60VDC
Operative range, IEC 61810	2

Coil vers	sions, DC co	il			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	mW
005	5	3.5	0.5	112	223
006	6	4.2	0.6	162	222
009	9	6.3	0.9	320	253
012	12	8.4	1.2	627	230
024	24	16.8	2.4	2350	245
048	48	33.6	4.8	9391	245
060	60	42.0	6.0	14000	257
AU 5					

All figures are given for coil without pre-energization, at ambient temperature +23°C Other coil voltages on request



1000V <sub>rms</sub>	
5000V <sub>rms</sub>	
≥8/8mm	
IIIa	
PTI250	
PTI175	
	5000V <sub>rms</sub> ≥8/8mm Illa PTI250

Datasheets and product data is subject to the

terms of the disclaimer and all chapters of

the 'Definitions' section, available at

http://relays.te.com/definitions



## Miniature Power PCB RYII & RYII Reflow Solderable (Continued)

### **Other Data**

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 -40 to +70°C +85°C at 6A

Category of environmental protection

IEC 61810 RTII - flux proof RTIII - wash tight1)

Vibration resistance (functional), form A (NO)/form B (NC) 20/5g Shock resistance (functional) form A (NO)/form B (NC) 20/5g Shock resistance (destructive) 100g

Terminal type PCB-THT. PCB-THR Weight 8g

Resistance to soldering heat THT IEC 60068-2-20 RTII: 270°C/10s RTIII: 260°C/5s

Resistance to soldering heat THR

IEC 60068-2-58 250°C, no infrared heating allowed

Packaging/unit

standard version tube/20 pcs., box/500 pcs. reel/280 pcs. reflow version box/1120 pcs. (4 reels)

1) not available as reflow-solderable version

#### **Accessories**

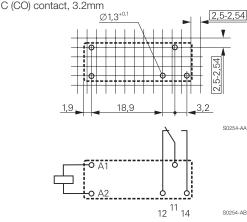
Accessories Miniature PCB Relay RY For details see datasheet

28,5

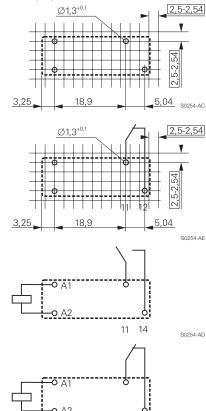
# PCB layout / terminal assignment

Bottom view on solder pins

1 form C (CO) contact, 3.2mm



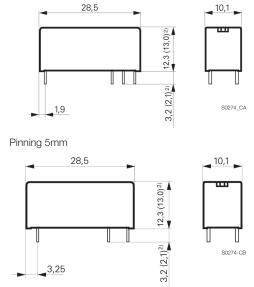
1 form A (NO), 1 form B (NC) contact 5mm



11 12

### Dimensions

Pinning 3.2mm



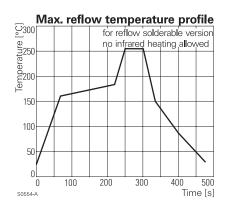
2) Values in brakets are valid for reflow-solderable version

S0254-AF

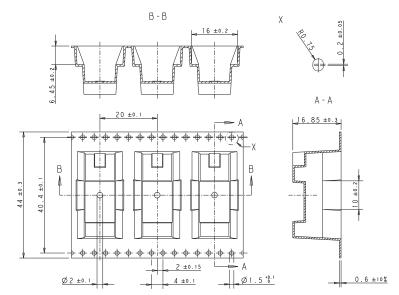


## Miniature Power PCB RYII & RYII Reflow Solderable (Continued)

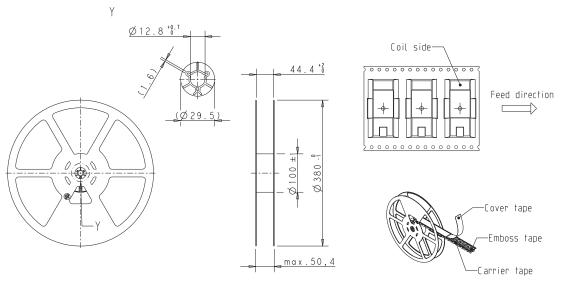
#### Soldering profile for reflow-solderable version

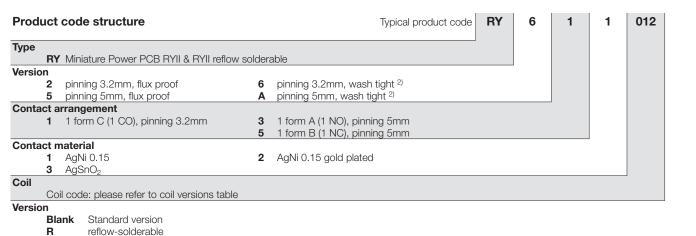


### Tape dimensions



#### Reel dimensions





2) not available as reflow-solderable version



# Miniature Power PCB RYII & RYII Reflow Solderable (Continued)

Product code	Version	Contacts	Contact material	Coil	Part number
RY211005	Pinning 3.2 mm	1 form C,	AgNi 0.15	5VDC	4-1393224-2
RY211012	flux proof	1 CO contact		12VDC	4-1393224-6
RY211024				24VDC	4-1393224-9
RY211048				48VDC	5-1393224-1
RY212005			AgNi 0.15	5VDC	5-1393224-2
RY212012			gold plated	12VDC	5-1393224-5
RY212024				24VDC	5-1393224-8
RY212048				48VDC	5-1393224-9
RY213005			AgSnO <sub>2</sub>	5VDC	6-1393224-0
RY213012				12VDC	6-1393224-1
RY213024				24VDC	6-1393224-2
RY213048				48VDC	6-1393224-3
RY531005	Pinning 5 mm	1 form A,	AgNi 0.15	5VDC	7-1393224-6
RY531012	flux proof	1 NO contact		12VDC	7-1393224-9
RY531024				24VDC	8-1393224-2
RY531048				48VDC	8-1393224-3
RY532012			AgNi 0.15	12VDC	8-1393224-4
RY532024			gold plated	24VDC	8-1393224-5
RY533012			AgSnO <sub>2</sub>	12VDC	8-1393224-8
RY533024			J 5 - F	24VDC	8-1393224-9
RY533048				48VDC	9-1393224-0
RY611005	Pinning 3.2 mm	1 form C,	AqNi 0.15	5VDC	1-1393225-7
RY611012	wash tight	1 CO contact	Ĭ –	12VDC	1-1393225-9
RY611024				24VDC	2-1393225-1
RY611048				48VDC	2-1393225-2
RY612005			AgNi 0.15	5VDC	2-1393225-3
RY612012			gold plated	12VDC	2-1393225-6
RY612024				24VDC	2-1393225-9
RY612048				48VDC	3-1393225-0
RY613005			AgSnO <sub>2</sub>	5VDC	5-1419136-2
RY613012			3 2	12VDC	3-1393225-1
RY613024				24VDC	3-1393225-3
RY613048				48VDC	3-1393225-4
RY631024		1 form A.	AgNi 0.15	24VDC	4-1415400-1
RYA31005	Pinning 5 mm	1 NO contact	9 4 4	5VDC	1393224-7
RYA31012	wash tight			12VDC	1393224-9
RYA31024				24VDC	1-1393224-2
RYA31048				48VDC	1-1393224-3
RYA32005			AgNi 0.15	5VDC	1-1393224-4
RYA32012			gold plated	12VDC	1-1393224-6
RYA32024			32.4	24VDC	1-1393224-8
RYA33005			AgSnO <sub>2</sub>	5VDC	1-1393224-9
RYA33024			1.3-11-2	24VDC	2-1393224-1

Product code	Version	Contacts	Contact material	Coil	Part number
RY211005R	pinning 3.2mm	1 form C,	AgNi 0.15	5VDC	1-1956170-2
RY211012R	flux proof	1 CO contact		12VDC	1-1956170-6
RY211024R	reflow solderable			24VDC	1956164-1
RY531005R	pinning 5.0mm	1 form A,		5VDC	1-1956171-1
RY531012R	flux proof	1 NO contact		12VDC	1-1956171-4
RY531024R	reflow solderable			24VDC	1-1956171-7