

# **Power PCB Relay T9S Solar**

- 1 pole 35A, 1 form A (NO) contact
- Contact gap >1.5mm (standard), >1.8mm (suffix S)
- 350mW hold power<sup>1)</sup>
- Ambient temperature up to 85°C at 35A
- The appliance is able to meet VDE V 0126-1-1
- Product in accordance to IEC 60335-1
- EN61095: AC7a at 85°C

Typical applications Photovoltaic inverter

Approvals	
VDE 40030974, UL E58304	
Technical data of approved types on request	

Contact Data	
Contact arrangement	1 form A (NO)
Contact gap	>1.5mm (standard), >1.8mm (suffix S)
Rated voltage	250VAC (1.8mm gap), 277VAC (1.5mm gap)
Rated current	35A <sup>2)</sup>
Breaking capacity max.	8750 VA
Contact material	AgNi
Initial contact resistance	75mΩ max. at 1A 6VDC
Frequency of operation, with	/without load 6/300min <sup>-1</sup>
Operate/release time max., ir	ncl bounce time 18/15ms

Contact ratings <sup>3)</sup>					
Туре	Contact	Load	Cycles		
IEC 61810					
T9SV1K15-12	A (NO)	35A, 250VAC, cosφ=1, 85°C	30x10 <sup>3</sup>		
T9SV1K15-12S	A (NO)	35A, 250VAC, cosφ=1, 85°C	20x10 <sup>3</sup>		
UL 508		•			
T9SV1K15-12	A (NO)	35A, 277VAC, resistive, 85°C	30x10 <sup>3</sup>		
T9SV1K15-12S	A (NO)	35A, 250VAC, resistive, 85°C	20x10 <sup>3</sup>		

Mechanical endurance, DC coil	5x10 <sup>5</sup> operations

Coil Data	
Rated coil voltage	12VDC
Coil insulation system according UL	class F

Coil ver	sions, DC co	oil			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	W
12	12 <sup>1)</sup>	9.6	0.8	64+10%	2.25 /
					min. 0.35
					hold

All figures are given for coil without pre-energization, at ambient temperature  $+23^{\circ}$ C. Other coil voltages on request.



Insulation Data	
Initial dielectric strength	
between open contacts	2500V <sub>rms</sub>
between contact and coil	4000V <sub>rms</sub>
Initial surge withstand voltage	
between contact and coil	6kV
Clearance/creepage	
between contact and coil	3/4mm
Material group of insulation parts	III
Tracking index of relay base	PTI 325

Othor	Date
Uliner	11212

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

www.te.com	/customersupport/rohssupportcenter
Ambient temperature	-40 to +85°C <sup>2)</sup>
Category of environmental protection	
IEC 61810	RTII - flux proof
Vibration resistance (functional)	10g
Shock resistance (functional)	10g
Shock resistance (destructive)	100g
Terminal type	PCB-THT
Mounting	see note <sup>2)</sup>
Mounting distance	≥10mm
Weight	appr. 30g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/5s
Packaging unit	box/500 pcs.

I After the energization time of 100ms with 12 VDC the coil requires a reduction of the coil voltage to 4.7...6.0 VDC.

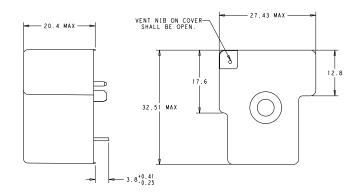
The relay connections and wiring have to be designed with an adequate cross sections to ensure the current flow and heat dissipation.

Contact ratings with relay properly vented.



## Power PCB Relay T9S Solar (Continued)

#### **Dimensions**



#### **Notes**

#### 1) General tolerance

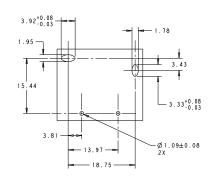
Diagram Dimension	Tolerance
< 1 mm	±0.1
1 ~ 3 mm	±0.2
> 3 mm	±0.3

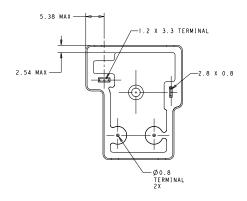
## 2) Dimensions of the pins after tin soldering

- a) +0.4 for the width and the thickness
- b) +1.0 for the length

## PCB layout / terminal assignment

Bottom view on solder pins







Product code	Version	Contact arrangement	Contact material	Contact gap	Coil	Part Number
T9SV1K15-12	PCB, flux tight	1 form A (NO) contact	AgNi	>1.5mm	12VDC	2027395-1
T9SV1K15-12S	PCB, flux tight	1 form A (NO) contact	AgNi	>1.8mm	12VDC	2027395-3

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for General Purpose Relays category:

Click to view products by TE Connectivity manufacturer:

Other Similar products are found below:

```
APF30318 JVN1AF-4.5V-F PCN-105D3MHZ 5JO-10000S-SIL 5JO-1000CD-SIL 5JO-400CD-SIL LY2S-AC220/240 LYQ20DC12
6031007G 6131406HQ 6-1393099-3 6-1393099-8 6-1393122-4 6-1393123-2 6-1393767-1 6-1393843-7 6-1415012-1 6-1419102-2 6-
1423698-4 6-1608051-6 6-1608067-0 6-1616170-6 6-1616248-2 6-1616282-3 6-1616348-2 6-1616350-1 6-1616350-8 6-1616358-7 6-
1616359-9 6-1616360-9 6-1616931-6 6-1617039-1 6-1617052-1 6-1617090-2 6-1617090-5 6-1617347-5 6-1617353-3 6-1617801-8 6-
1617802-2 6-1618107-9 6-1618248-4 M83536/1-027M CX-4014 MAHC-5494 MAVCD-5419-6 703XCX-120A 7-1393100-5 7-1393111-7
7-1393144-5 7-1393767-8
```