

Subminiature Intermediate Power Relay STN



- 5A switching capabilities
- 10kV impulse withstand voltage (Coil to contact)
- Highly efficient magnetic circuit for high sensitivity (200mW)
- Extremely small footprint utilising PCB area
- Class B & Class F insulation system
- Outline dimensions: 20.5 x 7.2 x 15.3 mm



Options and ordering codes

STN	A	-	1A	N	-	S	L	F	-	24VDC
Footprint										Coil Voltage
Standard (Layout Type 1)	NIL									
Layout Type 2	A									
			Contact arrangement							Class Insulation
			SPNO	1A						NIL B Class
										F F Class
				Contact Material						
				AgNi	N					
				AgSnO ₂	T					
						Sealing				
						S Sealed				
						F Flux Tight				
							L RoHS Compliant			

Contact Data

Contact Arrangement	1 Form A
Initial Contact resistance	100mΩ (at 1A 24VDC)
Contact Material	See ordering info
Contact Rating (Res. Load)	3A/5A 250VAC 28VDC
Max. switching voltage	277VAC/30VDC
Max. switching current	5A
Max. switching power	1385VA / 150W
Mechanical Life	5x10 ⁶ OPS
Electrical Life	1.2x10 ⁵ OPS

Characteristics

Initial Insulation Resistance	1000MΩ @ 500VDC
Dielectric Strength	Between coil & contacts 4000VAC 1min. Between open contact 1000VAC 1min.
Surge Voltage between contact & coil	10KV (1.2X50μs)
Operate time (at nomi. Volt)	Max. 10ms
Release time (at nomi. Volt)	Max. 10ms
Shock resistance	Functional 98m/s ² Destructive 980m/s ²
Humidity	35% to 85%
Ambient temperature	-40°C to 85°C
Vibration resistance	10 to 55Hz 1.5mm
Termination	PCB
Unit Weight	Approx. 3g
Construction	Sealed, Flux proof

Coil Data

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-up Voltage VDC	Coil Resistance Ω (1 ± 10%)
3	2.25	0.18	45
5	3.75	0.25	125
6	4.5	0.3	180
9	6.75	0.45	405
12	9	0.6	720
18	13.5	0.9	1620
24	18	1.2	2880

Coil

Coil power	200mW
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Safety Approval Ratings

at 85°C

UL/CUR	AgNi	5A 125VAC / 250VAC
		5 A 277VAC / 30VDC
		3A 125VAC / 250 VAC
		3A 277VAC / 30VDC
	AgSnO ₂	5A 125VAC / 250VAC
		5A 277VAC / 30VDC
		3A 125VAC / 250VAC
		3A 277VAC / 30VDC
VDE (pending)	B300, R300	
	AgNi	5A 250VAC / 30VDC
	AgSnO ₂	5A 250VAC / 30VDC

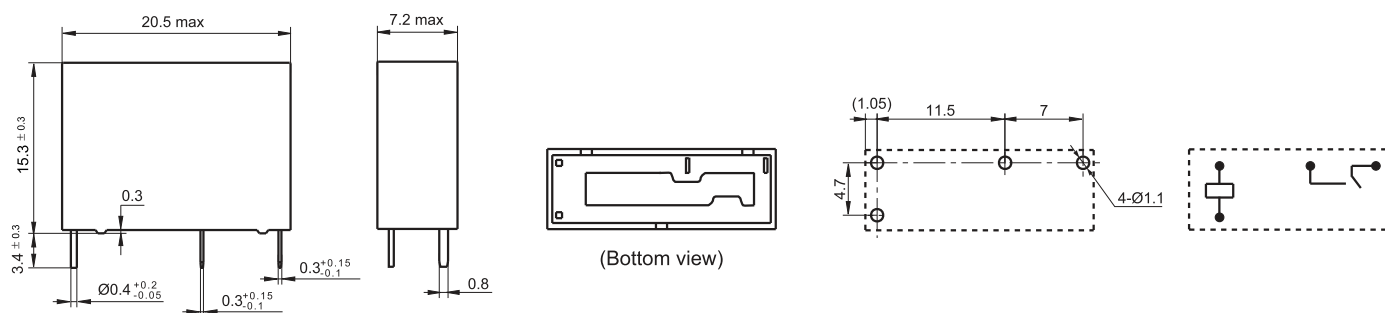
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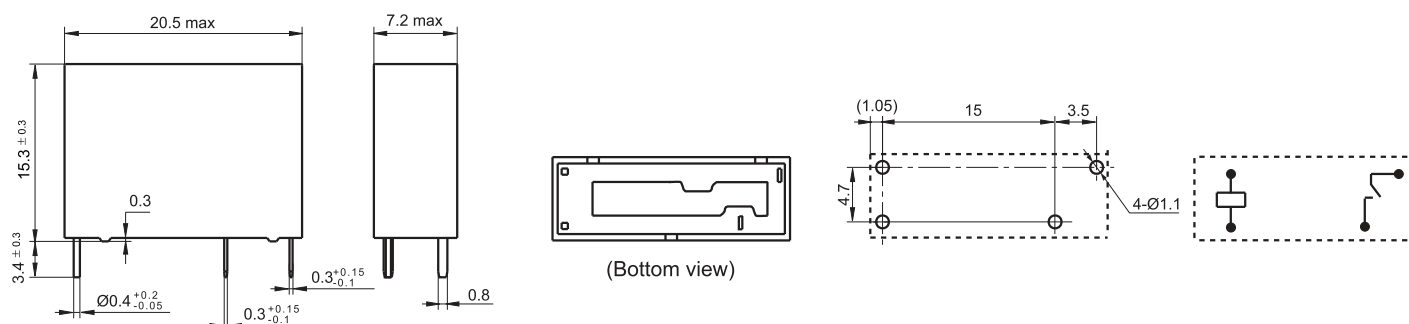
Outline dimensions

Wiring diagram and PC Board layout

Standard (Layout Type 1)



Layout Type 2



Characteristic Curve

