

AZ9541Y

SUBMINIATURE POWER RELAY

FEATURES

- Subminiature size for high density packaging
- Coil sensitivity to 114mW
- Extremely low cost
- Coils to 24VDC
- Epoxy sealed versions available
- 5 Amp contacts
- Class F Insulation standard
- UL, CUR file E43203



CONTACTS

Arrangement	SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 90W or 250VA Max. switched current: 5A Max. switched voltage: 220VDC* or 250VAC Note: If switching voltage is greater than 30 VDC, special precautions must be taken. Please contact the factory.
UL Rating	5A at 125VAC Resistive [1] 1A at 125VAC Resistive 85°C [1], [2] 3A at 30VDC Resistive 85°C [1], [2] TV-1 125VAC [2]
Material	Silver nickel [1], Silver Tin Oxide [2]
Resistance	< 100 milliohms initially

COIL

Power	
At Pickup Voltage (typical)	0.45W coil: 253mW 0.36W coil: 203mW 0.20W coil: 114mW
Max Continuous Dissipation	1.0W at 20°C (68°F) ambient
Temperature Rise	At nominal coil voltage: 0.45W: 54°C (97°F) 0.36W: 44°C (79°F) 0.2W: 30°C (54°F)
Max. Temperature	155°C (311°F)

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Other coil resistances and sensitivities available upon request.
4. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ NO: 1 x 10 ⁴ at 5A at 125VAC Res, and 1 x 10 ⁵ 3A at 30VDC
Operate Time (typical)	5ms max.
Release Time (typical)	5ms max.
Dielectric Strength (at sea level for 1 min.)	1100Vrms coil to contact 750Vrms between open contacts
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating	At nominal coil voltage 0.45W: -40°C (-40°F) to 85°C (185°F) 0.36W: -40°C (-40°F) to 85°C (185°F) 0.2W: -40°C (-40°F) to 85°C (185°F)
Storage	-40°C (-40°F) to 85°C (185°F)
Vibration	0.059" DA at 10–55Hz
Shock	10 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	4 grams

AMERICAN ZETTLER, INC.

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12/20/18

AZ9541Y

RELAY ORDERING DATA

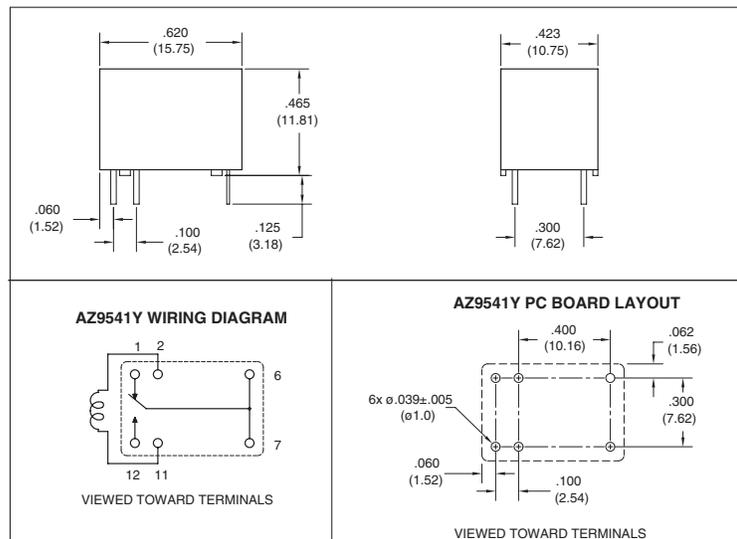
0.45 W COIL				
COIL SPECIFICATIONS				ORDER NUMBER*
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	
2.4	3.12	12.8	1.8	AZ9541Y-1C-2.4D
3	3.9	20	2.25	AZ9541Y-1C-3D
4.5	5.85	45	3.38	AZ9541Y-1C-4.5D
5	6.5	56	3.75	AZ9541Y-1C-5D
6	6.3	80	4.50	AZ9541Y-1C-6D
9	11.7	180	6.75	AZ9541Y-1C-9D
12	15.6	320	9.0	AZ9541Y-1C-12D
18	23.4	720	13.5	AZ9541Y-1C-18D
24	31.2	1280	18.0	AZ9541Y-1C-24D

0.36 W COIL				
COIL SPECIFICATIONS				ORDERNUMBER*
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	
2.4	3.12	19.2	1.8	AZ9541Y-1C-2.4DM
3	3.9	25	2.25	AZ9541Y-1C-3DM
4.5	5.85	67.5	3.38	AZ9541Y-1C-4.5DM
5	6.5	70	3.75	AZ9541Y-1C-5DM
6	6.3	100	4.50	AZ9541Y-1C-6DM
9	11.7	225	6.75	AZ9541Y-1C-9DM
12	15.6	400	9.0	AZ9541Y-1C-12DM
18	23.4	1080	13.5	AZ9541Y-1C-18DM
24	31.2	1600	18.0	AZ9541Y-1C-24DM

0.2 W COIL				
COIL SPECIFICATIONS				ORDERNUMBER*
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC	
2.4	3.12	28.8	1.8	AZ9541Y-1C-2.4DS
3	3.9	45	2.25	AZ9541Y-1C-3DS
4.5	5.85	101.3	3.38	AZ9541Y-1C-4.5DS
5	6.5	120	3.75	AZ9541Y-1C-5DS
6	6.3	180	4.50	AZ9541Y-1C-6DS
9	11.7	400	6.75	AZ9541Y-1C-9DS
12	15.6	700	9.0	AZ9541Y-1C-12DS
18	23.4	1620	13.5	AZ9541Y-1C-18DS
24	31.2	2800	18.0	AZ9541Y-1C-24DS

* Substitute "1CE" in place of "1C" to indicate silver tin contacts . Add suffix "E" for epoxy sealed version. add suffix "G" at the end of order number for gold plated contacts.

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: ± 0.010 "

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