

SUBMINIATURE POWER RELAY

FEATURES

- Subminiature size for high density packaging
- Coil sensitivity to 114 mW
- Extremely low cost
- Coils to 24 VDC
- Epoxy sealed version available
- 2 Amp contacts
- Life expectancy to 10 million operations
- UL, CUR file E43203



CONTACTS

Arrangement	SPDT (1 Form C)
Ratings	Resistive load:
Light Duty	Max. switched power: 30 W or 125 VA Max. switched current: 1 A Max. switched voltage: 150 VDC* or 300 VAC UL Rating: 1 A at 125 VAC General Use 1 A at 30 VDC Resistive
Medium Duty	Max. switched power: 30 W or 250 VA Max. switched current: 2 A Max. switched voltage: 150 VDC* or 300 VAC UL Rating: 2 A at 125 VAC General Use 1 A at 30 VDC Resistive.
Material	Silver nickel, gold clad
Resistance	< 100 milliohms initially

COIL

Power	
At Pickup Voltage (typical)	0.45W coil: 253 mW 0.36W coil: 203 mW 0.2W coil: 114 mW
Max Continuous Dissipation	0.8 W at 20°C (68°F) ambient
Temperature Rise	At nominal coil voltage: 0.45W coil: 54°C (97°F) 0.36W coil: 44°C (79°F) 0.2W coil: 30°C (54°F)
Max. Temperature	130°C (266°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	Minimum operations 1 x 10 ⁷
Mechanical	1 x 10 ⁵ at 2 A 120 VAC Res.
Electrical	
Operate Time (typical)	5 ms at nominal coil voltage
Release Time (typical)	1 ms at nominal coil voltage (with no coil suppressions)
Dielectric Strength (at sea level for 1 min.)	1250 Vrms coil to contact 750 Vrms between open contacts
Insulation Resistance	100 megohms min. at 20°C, 500 VDC
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating	At nominal coil voltage 0.45W: -25°C (-13°F) to 55°C (131°F) 0.36W: -25°C (-13°F) to 65°C (149°F) 0.2W: -25°C (-13°F) to 75°C (167°F)
Storage	-25°C (-13°F) to 105°C (221°F)
Vibration	0.062" (1.5 mm) DA at 10–55Hz
Shock	15 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	3.5 grams

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RELAY ORDERING DATA

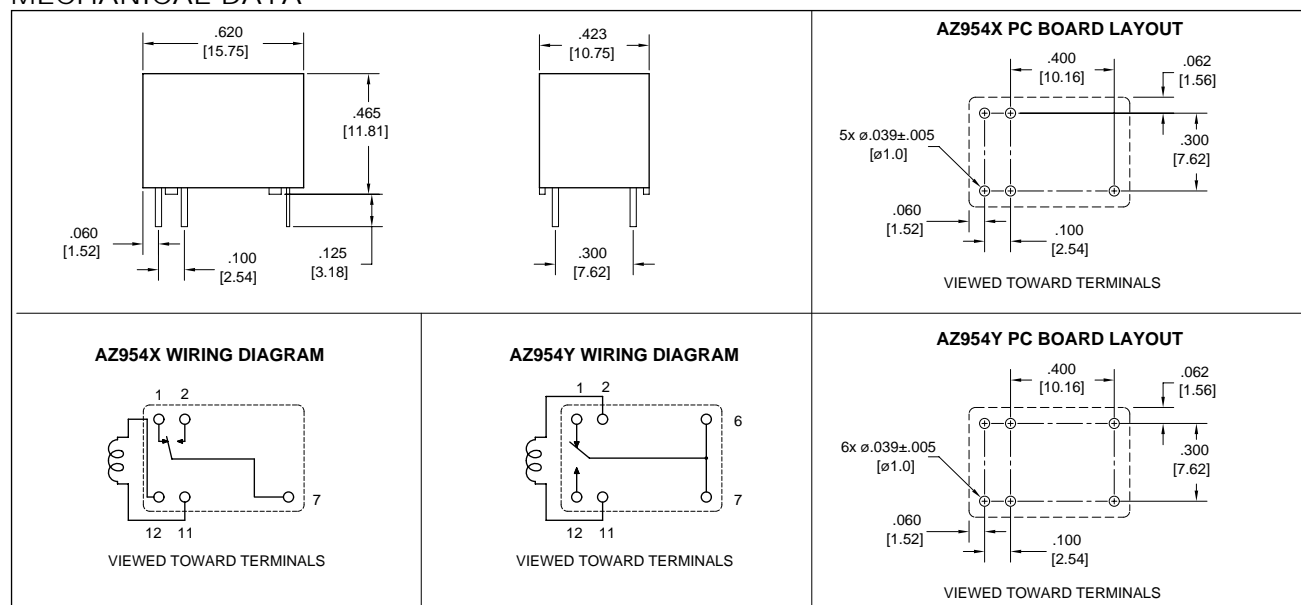
MEDIUM DUTY RELAYS – 0.45 W COIL					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC		
3	4.0	20	2.25	AZ954X-1C-3D	AZ954Y-1C-3D
5	6.7	56	3.75	AZ954X-1C-5D	AZ954Y-1C-5D
6	8.0	80	4.50	AZ954X-1C-6D	AZ954Y-1C-6D
9	12.0	180	6.75	AZ954X-1C-9D	AZ954Y-1C-9D
12	16.0	320	9.0	AZ954X-1C-12D	AZ954Y-1C-12D
24	32.0	1,280	18.0	AZ954X-1C-24D	AZ954Y-1C-24D

MEDIUM DUTY RELAYS – 0.36 W COIL					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC		
3	4.5	25	2.25	AZ954X-1C-3DM	AZ954Y-1C-3DM
5	7.5	70	3.75	AZ954X-1C-5DM	AZ954Y-1C-5DM
6	8.9	100	4.50	AZ954X-1C-6DM	AZ954Y-1C-6DM
9	13.4	225	6.75	AZ954X-1C-9DM	AZ954Y-1C-9DM
12	17.8	400	9.0	AZ954X-1C-12DM	AZ954Y-1C-12DM
24	35.7	1,600	18.0	AZ954X-1C-24DM	AZ954Y-1C-24DM

LIGHT DUTY RELAYS – 0.2 W COIL					
COIL SPECIFICATIONS				ORDER NUMBER*	
Nominal Coil VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	Must Operate VDC		
3	6.0	45	2.25	AZ954X-1C-3DS	AZ954Y-1C-3DS
5	9.8	120	3.75	AZ954X-1C-5DS	AZ954Y-1C-5DS
6	12.0	180	4.50	AZ954X-1C-6DS	AZ954Y-1C-6DS
9	17.8	400	6.75	AZ954X-1C-9DS	AZ954Y-1C-9DS
12	23.6	700	9.0	AZ954X-1C-12DS	AZ954Y-1C-12DS
24	47.3	2,800	18.0	AZ954X-1C-24DS	AZ954Y-1C-24DS

*Add suffix "E" for epoxy sealed version.

MECHANICAL DATA



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

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