

AZ9481F

16 AMP LOW PROFILE POWER RELAY

FEATURES

- Quick connect and PC terminals
- High power switching (4000 VA)
- High sensitivity, 128 mW pickup
- Low profile (less than .55" height)
- SPST (1 Form A)
- UL Class F (155°C) standard
- Epoxy sealed versions available
- DC coils up to 48 VDC
- UL file E43203, TÜV R50155384



CONTACTS

Arrangement	SPST (1 Form A)
Ratings	Resistive load:
Standard 1 Form A	Max. switched power: 300 W, 2500 VA Max. switched current: 10 A Max. switched voltage: 250 VAC / 30 VDC
High Capacity 1 Form A	Max. switch power: 300 W, 4000 VA Max. switch current: 16 A Max. switched voltage: 250 VAC / 30 VDC
Rated Load UL	Standard 1 Form A 10 A at 250 VAC Res. 100k cycles [1][2] 10 A at 30 VDC Res. 100k cycles [1][2] TV-5 [1][2] High Capacity 1 Form A 16 A at 125 VAC Res. 100k cycles [1][2] 10 A at 30 VDC Res. 100k cycles [1][2] TV-5 [1][2]
TÜV	High Capacity 1 Form A 16 A at 250 VAC Res. 50k cycles [1][2] 8 A at 250 VAC cos phi = 0.4 50k cycles [1][2] 10 A at 30 VDC Res. 50k cycles [1][2]
Material	Silver cadmium oxide [1] or silver tin oxide [2]
Resistance	< 100 milliohms initially (6 V, 1 A voltage drop method)

COIL

Power At Pickup Voltage (typical)	128 mW
Max. Continuous Dissipation	1.34 W at 20°C (68°F)
Temperature Rise	13°C (23°F) at nominal coil voltage
Temperature	Max. 155°C (333°F)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ 10 A 250 VAC Res.
Operate Time (typical)	10 ms at nominal coil voltage
Release Time (typical)	5 ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	2500 Vrms coil to contact 1000 Vrms contact to contact
Insulation Resistance	100 megohms min. at 20°C, 500 VDC, 50% RH
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 155°C (333°F)
Vibration	0.062" DA at 10–55 Hz
Shock	10 g operational, 100g destructive
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C. with quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
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	8 grams

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Specifications subject to change without notice.

AZ9481F

RELAY ORDERING DATA

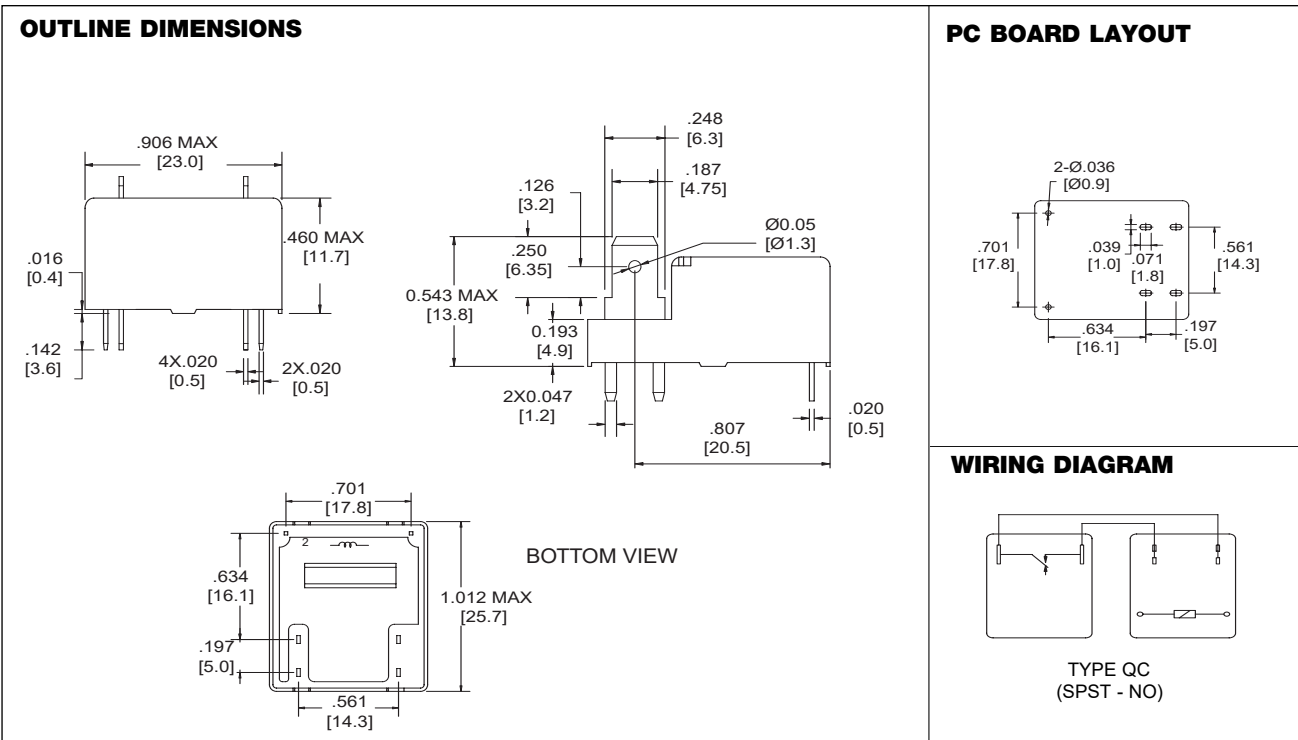
COIL SPECIFICATIONS SPST-NO (1 Form A)				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	AgCdO Contacts	AgSnO ₂ Contacts
5	4	13.4	125	AZ9481F-1A-5D	AZ9481F-1AE-5D
6	4.8	16.1	180	AZ9481F-1A-6D	AZ9481F-1AE-6D
9	7.2	24.1	405	AZ9481F-1A-9D	AZ9481F-1AE-9D
12	9.6	32.2	720	AZ9481F-1A-12D	AZ9481F-1AE-12D
18	14.4	48.3	1620	AZ9481F-1A-18D	AZ9481F-1AE-18D
24	19.2	64.4	2880	AZ9481F-1A-24D	AZ9481F-1AE-24D
48	38.4	128.8	11520	AZ9481F-1A-48D	AZ9481F-1AE-48D

*Add suffix "E" for epoxy sealed version.

COIL SPECIFICATIONS SPST-NO (1 Form A) - HIGH CAPACITY				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance $\pm 10\%$	AgCdO Contacts	AgSnO ₂ Contacts
5	4	13.4	125	AZ9481F-1AT-5D	AZ9481F-1AET-5D
6	4.8	16.1	180	AZ9481F-1AT-6D	AZ9481F-1AET-6D
9	7.2	24.1	405	AZ9481F-1AT-9D	AZ9481F-1AET-9D
12	9.6	32.2	720	AZ9481F-1AT-12D	AZ9481F-1AET-12D
18	14.4	48.3	1620	AZ9481F-1AT-18D	AZ9481F-1AET-18D
24	19.2	64.4	2880	AZ9481F-1AT-24D	AZ9481F-1AET-24D
48	38.4	128.8	11520	AZ9481F-1AT-48D	AZ9481F-1AET-48D

*Add suffix "E" for epoxy sealed version.

MECHANICAL DATA



Dimensions in inch with millimeters in brackets below. Tolerance: ± 0.10 "

AMERICAN ZETTLER, INC.

4/9/10

PHONE: (949) 831-5000

www.azettler.com

E-MAIL: SALES@AZETTLER.COM

This specification provides an overview of the most significant part features. Any individual applications and operating conditions are not taken into consideration. It is recommended to test the product under application conditions. Responsibility for the application remains with the customer. Proper operation and service life cannot be guaranteed if the part is operated outside the specified limits.