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 R50053055

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. 100k cycles [1][2] 8 A at 250 VAC cos phi = 0.4 100k cycles [1][2] 10 A at 30 VDC Res. 100k cycles [1][2]
Material	Silver cadmium oxide [1] or silver tin oxide [2] Gold plating available.
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.

AMERICAN ZETTLER, INC. *www.azettler.com*

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

12/14/05W

AZ9481F

RELAY ORDERING DATA

COIL SPECIFICATIONS SPST-NO (1 Form A)				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ±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

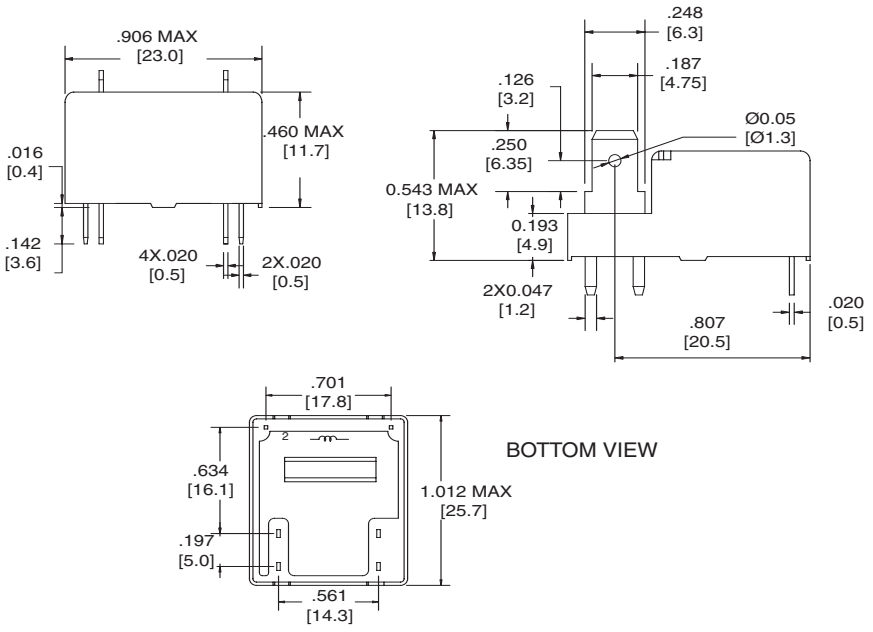
*Add suffix “E” for epoxy sealed version. Add suffix “A” for gold plated contacts.

COIL SPECIFICATIONS SPST-NO (1 Form A) - HIGH CAPACITY				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance ±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

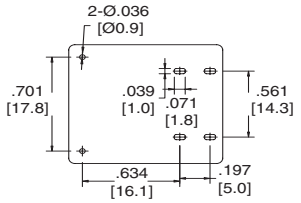
*Add suffix “E” for epoxy sealed version. Add suffix “A” for gold plated contacts.

MECHANICAL DATA

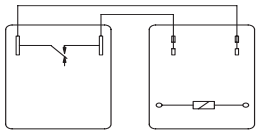
OUTLINE DIMENSIONS



PC BOARD LAYOUT



WIRING DIAGRAM



TYPE QC
(SPST - NO)

Dimensions in inch with millimeters in brackets below. Tolerance:±.010”

AMERICAN ZETTLER, INC. www.azettler.com

75 COLUMBIA • ALISO VIEJO, CA 92656 • PHONE: (949) 831-5000 • FAX: (949) 831-8642 • E-MAIL: SALES@AZETTLER.COM

12/14/05W