# **AZ696** \_

# 10 AMP SUBMINIATURE POWER RELAY

# **FEATURES**

- Miniature size: Form A version: 0.63" (16mm) height,
   1.10" (30mm) length, 0.39" (10mm) width
- High sensitivity, 100mW pickup
- Dielectric strength 4000Vrms
- Isolation spacing greater than 8mm
- Approvals/Standards include: UL, VDE, IEC
- 10 Amp switching capability
- Epoxy sealed for automatic wave soldering and cleaning
- UL, CUR file E43203
- VDE file 40012571



Arrangement	SPDT (1 Form C) SPST (1 Form A), SPST (1 Form B)
Ratings	Resistive load: Max. switched power: 300W or 2500VA Max. switched current: 10A Max. switched voltage: 240VDC* or 440VAC
	*Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Rated Load UL	10A at 30VDC Resistive 10A at 250VAC General use 1/4 HP at 120VAC 1/2 HP at 250VAC B300 Pilot duty
VDE	1 Form A / 1 Form B (unsealed) 10 A at 250VAC, resistive, 85°C, 50k cycles 1 Form C (unsealed)
	10 A at 250VAC, resistive, 85°C, 50k cycles
	1 Form A / 1 Form B / 1 Form C (sealed) 10 A at 250VAC, resistive, 85°C, 10k cycles
Material	Silver tin oxide
Resistance	< 30 milliohms initially (at 6V, 1A voltage drop method)

# COIL

Power	
At Pickup Voltage (typical)	110mW
Max. Continuous Dissipation Temperature Rise	1.5W at 20°C (68°F) ambient 1.2W at 40°C (104°F) ambient 20°C (36°F) at nominal coil voltage
Temperature	Max. 110°C (230°F)



### **GENERAL DATA**

Life Expectancy Mechanical Electrical	Minimumoperations 10 million 1 X 10 <sup>5</sup> at 8A, 250VAC Res.		
Operate Time (typical)	10ms at nominal coil voltage		
Release Time (typical)	5ms at nominal coil voltage (with no coil suppression)		
Dielectric Strength (at sea level for 1 min.)	4000Vrms coil to contact 1000Vrms between open contacts		
Insulation Resistance	1000 megohms min. at 20°C, 500VDC, 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 110°C (230°F)		
Vibration	0.062" (1.5mm) DA at 10-55Hz		
Shock	20g		
Enclosure	P.B.T. polyester		
Terminals	Tinned copper alloy, P.C.		
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	11 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.
- 4. It's recommended to remove vent nipple on sealed versions to expand life expectancy when switching higher loads.

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# **RELAY ORDERING DATA**

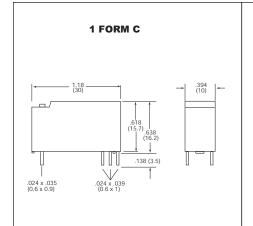
COIL SPECIFICATIONS			ORDER NUMBER		
Nominal Coil VDC	Must Operate VDC	Max Continuous VDC	Coil Resistance Ohms ± 10%	1 Form A (SPST-NO)	1 Form C (SPDT)
5	3.5	12.0	110	AZ696-1AE-5D	AZ696-1CE-5D
6	4.2	14.5	160	AZ696-1AE-6D	AZ696-1CE-6D
9	6.3	22.0	360	AZ696-1AE-9D	AZ696-1CE-9D
12	8.4	29.5	660	AZ696-1AE-12D	AZ696-1CE-12D
18	12.6	44.0	1,500	AZ696-1AE-18D	AZ696-1CE-18D
24	16.8	54.0	2,200	AZ696-1AE-24D	AZ696-1CE-24D
48	33.6	102.0	8,000	AZ696-1AE-48D	AZ696-1CE-48D

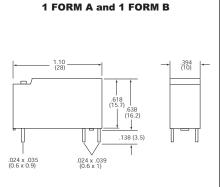
<sup>\*</sup> Substitute "1BE" in place of "1AE" for 1 Form B contact. Add Suffix "E" at the end of order number for sealed version. When suffix "E" is specified for Epoxy Seal, refer to AZ "Relay Technical Notes" on AZ website - Product Resources. Consult factory for other PCB process conditions that may apply.

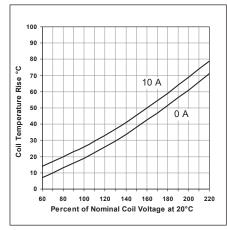
## INTERNATIONAL APPROVALS

Germany	VDE 0435/09.72 at 8 Amps
-	VDE 0631/12.83 at 8 Amps
	VDE 0700/1/2.81 at 8 Amps

# MECHANICAL DATA

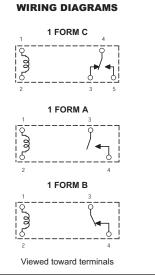


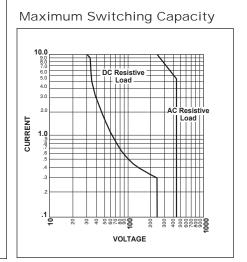




Coil Temperature Rise

# 1 FORM C 2 x e .051 (e 1.3) 748 (19.) 1 FORM B 2 x e .059 (c 1.5) 1 FORM A and 1 FORM B 2 x e .051 (e 1.3) (e 1.5) 1 126 (3.2) 2 x e .059 (e 1.5) 1 197 (5) Viewed toward terminals





Dimensions in inches with metric equivalents in parentheses. Tolerance: ± .010"

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