

# AZSR165

## 80 AMP MINIATURE POWER RELAY

### FEATURES:

- Dielectric strength 4000Vrms
- 80 Amp switching capability
- Contact gap : 3.0 mm Min
- Clearance / creepage > 10mm
- UL : E365652
- TUV : B170988793008



### CONTACTS

<b>Arrangement</b>	SPST (1 Form A)
<b>Ratings</b>	Resistive load: Max. switched power: 55200 VA Max. switched current: 80A Max. switched voltage: 690VAC
<b>Rated Load UL/TUV</b>	Making 10A, Carrying 65A, Breaking 10A at 690VAC, Res., 100k cycles, 85°C [1] Making 20A, Carrying 65A, Breaking 20A at 690VAC, Res., 30k cycles, 85°C [1] Making 20A, Carrying 65A, Breaking 20A at 690VAC, Res., 100k cycles, 85°C [2] 80A, 540VAC, Res., 1k cycles, 85°C [1] 80A, 690VAC, Res., 1k cycles, 85°C [2]
<b>Material</b>	Silver Nickel [1], Silver Tin Oxide [2]
<b>Resistance</b>	< 100mΩ initially (at 6V, 1A, voltage drop method) < 10 mΩ initially (at 10A, voltage drop method)

### COIL

<b>Power At pickup Voltage Max. Continuous Dissipation Temperature Rise</b>	1246 mW (typical) 2.2 W at 20°C(68°F) ambient 70°C Max. at Rated voltage, 85°C
<b>Temperature</b>	Max. 155°C(311°F) class F

### 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.

### GENERAL DATA

<b>Life Expectancy</b>	Minimum operations
<b>Mechanical</b>	1000,000 cycles Min.
<b>Electrical</b>	65A at 690 VAC, Res., 1k cycles, 85°C Making 10A, Carrying 65A, Breaking 10A /690VAC, Res., 100k cycles, 85°C
<b>Operate Time(typical)</b>	40 ms Max. at nominal coil voltage
<b>Release Time(typical)</b>	10 ms Max. at nominal coil voltage (with no coil suppression)
<b>Dielectric Strength (at sea level for 1min.)</b>	4000 Vrms(coil to contacts) 2000 Vrms(between open contacts)
<b>Surge Voltage</b>	10KV @1.2/50μs (coil to contacts)
<b>Insulation Resistance</b>	1,000MΩ min. at 20°C 500VDC 50% RH
<b>Holding voltage</b>	Greater than 40% of nominal coil voltage
<b>Dropout</b>	Greater than 5% of nominal coil voltage
<b>Ambient Temperature Operating Storage</b>	At rated coil voltage -40°C(-40F) to 85°C(185°F) -40°C(-40F) to 105°C(221°F)
<b>Vibration</b>	1.5mm DA at 10-55 Hz
<b>Shock</b>	10g
<b>Enclosure</b>	P.B.T, Polyester
<b>Terminals</b>	Tinned copper alloy, P.C.
<b>Max. Solder Temp.</b>	270°C(518°F)
<b>Max. solder time</b>	5 seconds
<b>Weight</b>	76g

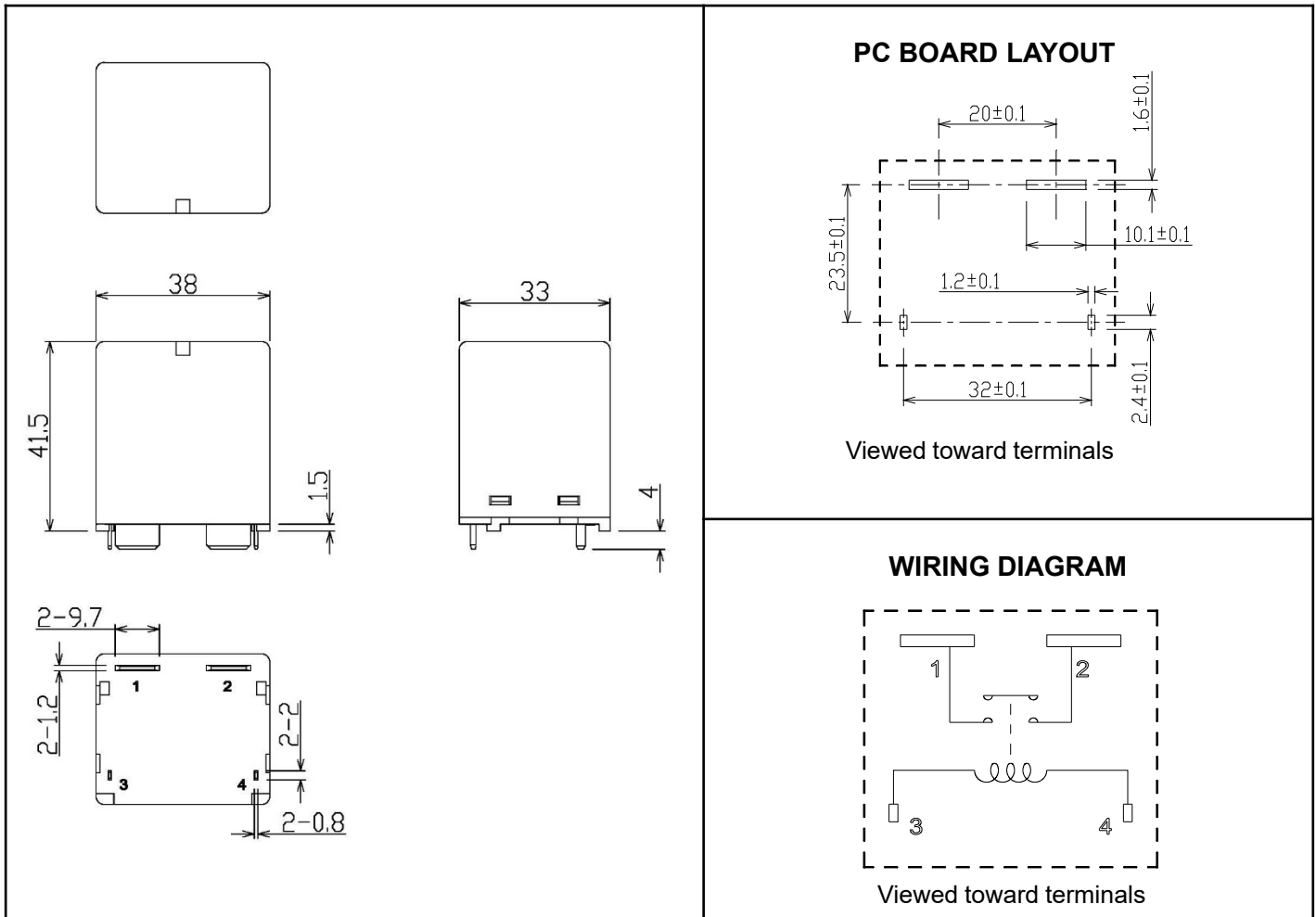
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## RELAY ORDERING DATA

COIL SPECIFICATIONS					ORDER NUMBER
Nominal Coil VDC	Must Operate VDC	Min. holding VDC	Max. Continuous VDC	Coil Resistance $\Omega \pm 10\%$	
6	4.5	2.4	6.6	16.5	AZSR165-1A-6DL
9	6.75	3.6	9.9	37	AZSR165-1A-9DL
12	9	4.8	13.2	65	AZSR165-1A-12DL
24	18	9.6	26.4	260	AZSR165-1A-24DL

\*For Silver Tin Oxide contacts relplace "1A" with "1AE".

## MECHANICAL DATA



Tolerance:  $\pm 0.5\text{mm}$

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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.