

# SONGLE RELAY

	<p>RELAY ISO9002</p>	<p><b>SRA</b></p>
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## 1. MAIN FEATURES

- Subminiature, Light Weight
- Big Gap Type Available for Heavy Motor Load Switching
- Improved Resistance to Shock and Vibration
- High Contact Current Capacity
- Automotive-Oriented design

## 2. APPLICATIONS

- Interval Wipers, Door Lock, Window Lifter, Alarm System
- Wiper Motor Reverse, Automatic Mirror Adjustment
- Fuel Pump Control, Belt Tension Adjustment

## 3. ORDERING INFORMATION

SRA	XX VDC	C	L
Model of relay	Nominal coil voltage	Contact form	Coil sensitivity
SRA	03,05,06,09,12,18,24VDC	A:1 form A	L:0.60W
		C:1 form C	D:0.80W

## 4. RATING

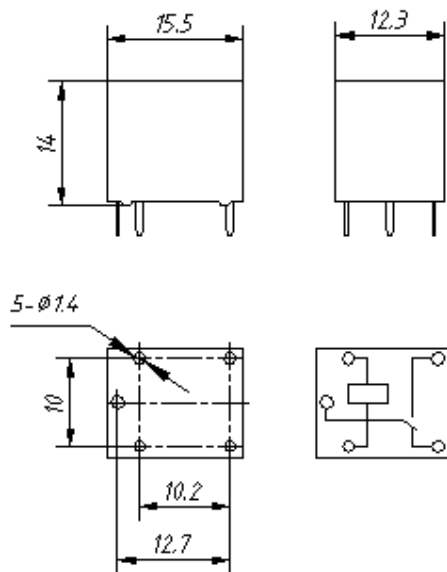
20A/125VAC 14VDC

UL/CUL FILE NUMBER: E167996 10A/125VAC 14VDC

## 5. DIMENSION (unit:mm)

### DRILLING (unit:mm)

### WIRING DIAGRAM



## 6. COIL DATA CHART (AT20°C)

Coil Sensitivity	Coil Voltage Code	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega$ ) $\pm 10\%$	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max-Allowable Voltage (VDC)
High Sensitivity	03	3	200	15	abt. 0.6	75% Max.	10% Min.	110%
	05	5	120	42				
	06	6	100	60				
	09	9	66.7	135				
	12	12	50	240				
Standard Sensitivity	24	24	25	960	abt. 0.8	75% Max.	10% Min.	110%
	03	3	267	11.25				
	05	5	160	31.25				
	06	6	133.4	45				
	09	9	100	90				
	12	12	66.7	180				
	18	18	44.4	405				
	24	24	33.4	720				

## 7. CONTACT RATING

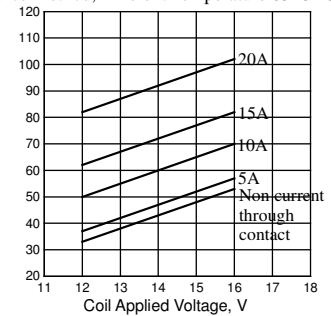
Item	Type	SRA
Contact Capacity Resistive Load ( $\cos\Phi=1$ )		N/C : 15A 14VDC , 10A 120VAC N/O : 20A 14VDC , 10A 120VAC
Inductive Load ( $\cos\Phi=0.4$ L/R=7msec)		6A, 14VDC
Rated Carrying Current		25A/hr
Max. Allowable Voltage		250VAC 30VDC
Max. Allowable Current		20A
Contact Material		AgSnO <sub>2</sub>

## 8. PERFORMANCE (at initial value)

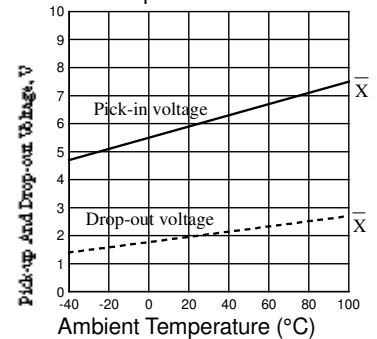
Item	Type	SRA
Contact Resistance		100m $\Omega$ Max.
Operation Time		10msec
Release Time		5msec
Dielectric Strength		
Between coil & contact		1500VAC 50/60Hz (1 minute)
Between contacts		1000VAC 50/60Hz (1 minute)
Surge Resistance		1500V
Insulation Resistance		100 M $\Omega$ Min. (at 500VDC)
Max. ON/OFF Switching		
Mechanically		300 operation/min
Electrically		30 operation/min
Ambient Temperature		-40°C to +80°C
Operating Humidity		45 to 85% RH
Coil Temperature Rise		40 deg. Max. (at rated coil voltage)
Vibration		
Endurance		10 to 55HZ Double Amplitude 1.5mm
Error Operation		
Shock		
Endurance		100G Min.
Error Operation		10G Min.
Life Expectancy		
Mechanically		10 <sup>7</sup> ops. Min. (no load)
Electrically		10 <sup>5</sup> ops. Min.
Weight		abt. 6grs.

## 9. REFERENCE DATA

1 Coil Temperature Rise  
Point Measured : Inside The Coil  
Contact Current : Now Current Through Contact. 5A, 10A, 15A, 20A  
Resistance Method, Ambient Temperature 85°C 185°C



### 2. Ambient Temperature Characteristics



### 3. Electrical Life Test (at rated load)

Quantity : n=6(NC=3, NO=3)  
Load : Resistive Load (NC side 2A 14VDC  
NO side 5A 14VDC)  
Operating Frequency : ON 1.5sec. OFF 1sec.  
Contact Welding : 0 time  
Misconduct : 0 time

