

# Double Pole, Electrically Held, 1 Amp and Less (Continued)

SHC, SHCD, SHCS, SHCSD



Standard / Sensitive .100 Grid Surface Mount **Commercial Relay** 



Standard / Sensitive .100 Grid Surface Mount **Diode Suppressed Commercial Relay** 





**Terminal View** 

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# **Product Facts**

- Hermetically sealed
- **■** Excellent RF switching

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- Suppression Diode
- Hermetically sealed
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#### **Electrical Characteristics**

Contact Arrangement —

2 Form C (DPDT)

#### Contact Material —

Stationary

Gold/platinum/palladium/silver alloy (gold plated)

Moveable -

Gold/platinum/palladium/silver alloy

(gold plated)

# Contact Resistance —

Before Life — 100 milliohms max. (measured @ 10 mA @ 6 Vdc) After Life — 200 milliohms max. (measured @ 1 A @ 28 Vdc)

# Mechanical Life Expectancy —

1 million operations

#### Coil Voltage —

5 to 26.5 Vdc (SHC/SHCD) 5 to 48 Vdc (SHCS/SHCSD)

### Coil Power -

SHC/SHCD — 660 mW max. @ 25°C SHCS/SHCSD — 565 mW max. @ 25°C

**Duty Cycle** — Continuous

Pick-up Voltage — Approximately 70% of nominal coil voltage

# Pick-up Sensitivity -

SHC/SHCD — 180 mW max. @ 25°C SHCS/SHCSD — 90 mW max. @ 25°C

### **Contact Ratings**

Contact Load	Туре	Operations Min.
1.0 A @ 28 Vdc	Resistive	100,000
250 mA @ 115 Vac, 60 Hz & 400 Hz	Resistive (Case not grounded)	100,000
100 mA @ 115 Vac, 60 Hz & 400 Hz	Resistive	100,000
0.2 A @ 28 Vdc	Inductive (0.32 Henry)	100,000
0.1 A @ 28 Vdc	Lamp	100,000
30 μA @ 50 mVdc	Low Level	1,000,000

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to change.



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(Continued)

# **Operating Characteristics**

Timing —
Operate Time —
SHC/SHCD — 4.0 ms max.
SHCS/SHCSD — 6.0 ms max.
Release Time —
SHC — 3.0 ms max.
SHCS — 3.0 ms max.
SHCS — 6.0 ms max.
(suppression diode)
SHCSD — 7.5 ms max.

### Dielectric Withstanding Voltage —

Between Open Contacts — 350 Vrms 60 Hz Between Adjacent Contacts — 350 Vrms 60 Hz

Between Contacts & Coil — 350 Vrms 60 Hz

(suppression diode)

# Insulation Resistance —

1,000 megohms @ 500 Vdc

### **Environmental Characteristics**

Temperature Range —

-55°C to +85°C

Weight — SHC/SHCD —

0.09 oz. (2.55 gms) SHCS/SHCSD — 0.15 oz. (4.30 gms)

Vibration Resistance —

10 G's, 10 to 500 Hz

# Shock Resistance —

30 G's, 6 ±1 ms

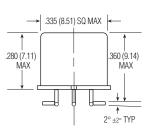
### **Semiconductor Characteristics**

Diode —

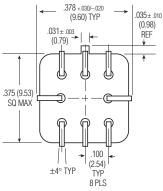
100 Vdc peak inverse voltage (PIV) 1.0 Vdc max. transient voltage

### **Standard Coil Data**

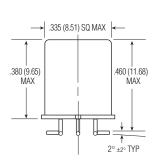
	Nom. Coil Voltage (Vdc)	Coil Resistance in Ohms ±20% @ 25°C	Pickup Voltage Vdc (Max.) @ 25°C	Nom. Coil Power (mW) @ 25°C	Max. Coil Voltage	Coil Desig.
SHC/SHCD	5.0	64	3.8	391	5.8	5
	6.0	98	4.9	367	8.0	6
	9.0	220	7.0	368	12.0	9
	12.0	400	9.0	360	16.0	12
	18.0	880	14.0	368	24.0	18
	26.5	1,600	18.0	439	32.0	26
SHCS/SHCSD	5.0	100	3.5	250	7.5	5
	6.0	200	4.5	180	10.0	6
	9.0	400	6.8	203	15.0	9
	12.0	800	9.0	180	20.0	12
	18.0	1,600	13.5	203	30.0	18
	26.5	3,200	18.0	219	40.0	26
-	36.0	6,500	24.0	199	57.0	36
	48.0	11,000	32.0	209	75.0	48



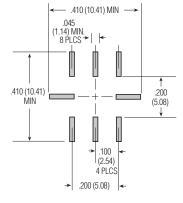
SHC/SHCD Enclosure



SHC/SHCD/SHCS/SHCSD Header



SHCS/SHCSD Enclosure



**Recommended Solder Pad Layout** 

# **Ordering Instructions**

Catalog-selected Relays: The catalog number is derived by choosing the proper CODE for each of the relay characteristics in the order in which the codes are listed.

Specifying a Part Number Example:	<u>Type</u>	<u>Diodes</u>	<u>Coils</u>
	SHC	D	-26

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