

# 25 Amp Ultraminiature Automotive PCB Relay PC565



### FEATURES

- Ultraminiature Design
- Sensitive Coil (Low Pull In Voltage) Available
- Contact Switching Capacity up to 30 Amps
- UL Class F Insulation Available
- Sealed, Immersion Cleanable
- Fully Automated Assembly
- Class B +85°C Standard
- Class F +105°C Option
- Two Coil Powers Available
- RoHS Compliant
- Available as a Dual see **PC 567**

### CONTACT RATINGS 14 VDC

Contact Form	1 Form C (SPDT)
Max Switching Current	30 A
Max Switching Power	480 Watts
Max Switching Voltage	16 VDC
Max Continuous Current	25 A
Motor Locked Rotor	25 A at 14 VDC

### CHARACTERISTICS

Operate Time	10 ms Max
Release Time	5 ms Max
Insulation Resistance	100 MΩ min at 500VDC,
Dielectric Strength	500 V 50 Hz between contacts
	1,000 V 50 Hz between coil and contacts
Shock Resistance	98 m/s <sup>2</sup> 11 ms
Vibration Resistance	10 Hz - 500 Hz; Acceleration: 43.1 m/s <sup>2</sup>
Terminal Strength	5 N
Solderability	260°C for 5 seconds
Operating Temperature	-40°C to 85°C Standard (Class B)
Operating Temperature	-40°C to 105°C Class F
Relative Humidity	85% (40°C)
Weight	4.1 g
Power Consumption	Nil: 640mW, H: 800 mW

### CONTACT DATA

Material	AgSnO <sub>2</sub>	
Service Life	Electrical	1 x 10 <sup>5</sup> Operations
	Mechanical	1 x 10 <sup>6</sup> Operations

### CROSS REFERENCES

Omron G8N
Omron G8N-1-DC12SK Crosses to PC565-1C-12-X

Song Chuan 103
Song Chuan 103-1CH-C-12VDC Crosses to PC565-1C-12-X

### ORDERING INFORMATION

Example:	PC565	-1C	-12	H	F	-X
Model:	<b>PC565</b>					
Contact Form:	<b>1C</b> (SPDT)					
Coil Voltage:	<b>12</b>					
Enclosure:	<b>Nil: Sealed, S1: Flux Tight<sup>(1)</sup></b>					
Coil Power:	<b>Nil: 640 mW; H: 800 mW</b>					
Insulation System:	<b>Nil: -40° C to +85° C; F: -40° C to +105° C</b>					
RoHS Compliant:	<b>-X</b>					

\*White cover and suited for reflow soldering.

(1) Flux Tight relays utilize high temperature plastic, white in color, specifically for Reflow Soldering. The UV hole is open. The relay is NOT Suitable for water wash cleaning.

Box Quantity: 200; 40 Per Tube

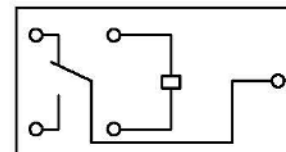
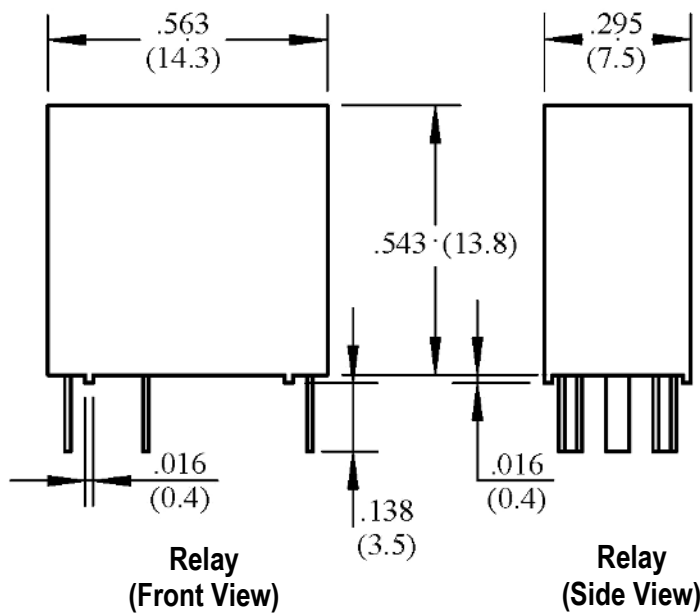
**COIL DATA**

Coil Option	Coil Voltage (VDC)		Resistance (Ohms ± 10%)	Must Operate Voltage Max (VDC)	Must Release Voltage Min. (VDC)	Coil Power (mW)
	Rated	Max				
H:	12	16	180	6.5	1.0	800
Nil:	12	16	225	7.2	1.0	640

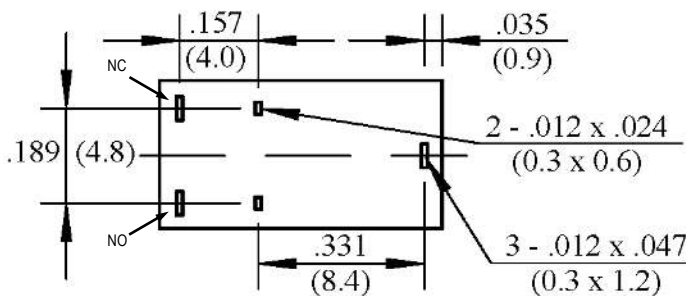
**NOTES:**

The use of any coil voltage less than the rated voltage will compromise the operation of the relays.  
 Must Operate Voltage and Release voltages are for test purposes only and are not to be used as design criteria.

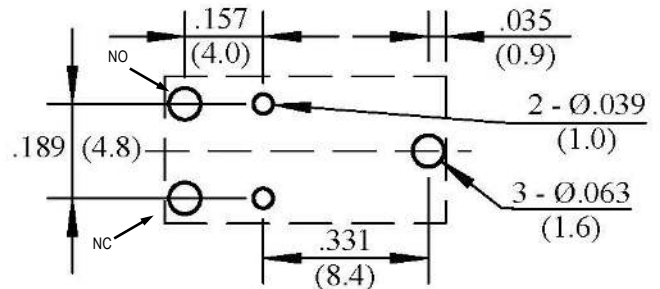
**DIMENSIONS inches/(mm)**



**Wire Diagram (Bottom View)**

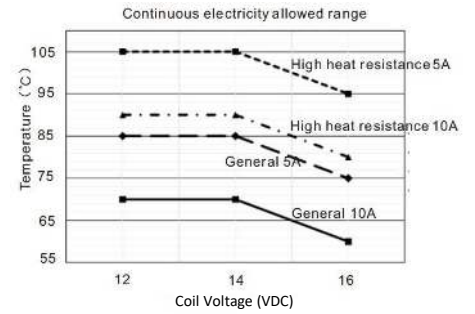
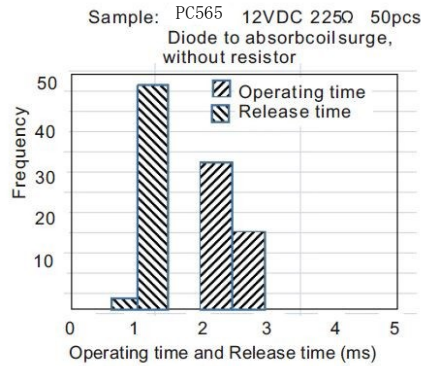
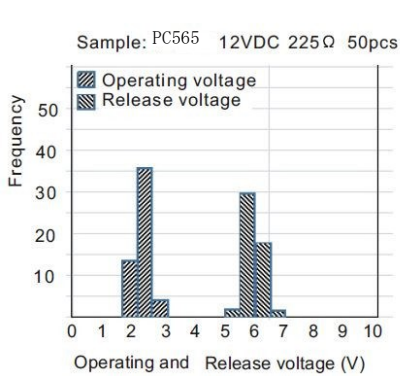


**Terminal Layout (Bottom View)**

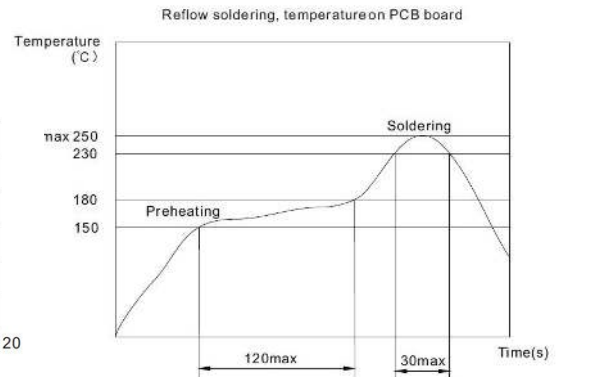
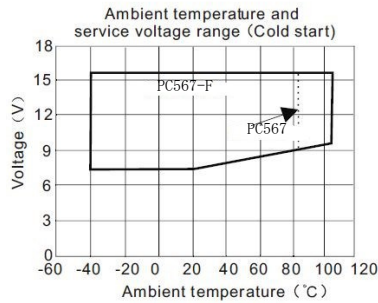
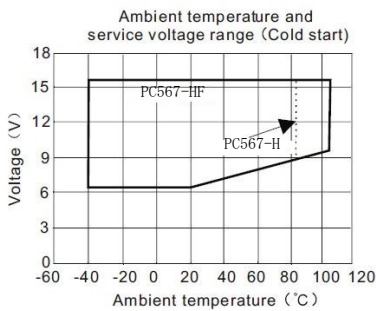
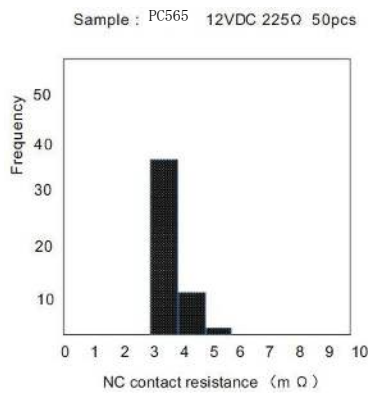
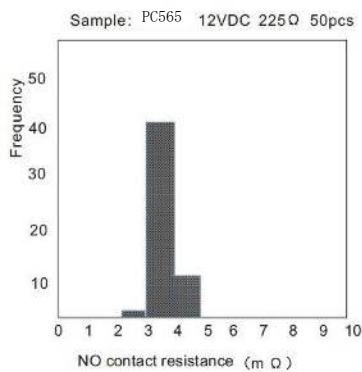


**PC Board Layout (Top View)**

REFERENCE DATA



Note:  
Contact electric current: 5A (10A for reference data)  
Max. coil temperature general 155°C  
Max. coil temperature high heat resistance 180°C



Recommended soldering temperature, only for reflow soldering version

