



## 600 series 15 Amp Sensitive PC Board Relay

**FII** File E55708 (File LR48569)

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

#### **Features**

- · Low power sensitive coil.
- 1 Form A, 1 Form B and 1 Form C contact arrangements.
- Various contact materials and types for ratings to 15 amps.
  Coil assembly rated 130°C, 94V-O.
- Applications include sensor and timer controls, emergency lighting, instrmentation, alarm systems, smoke and fire detectors, business equipment and vending machines.

#### **Contact Data**

Arrangements: 1 Form A (SPST-NO), 1 Form B (SPST-NC) and 1 Form C

Material and Type: Gold-silver crossbar, silver-cadmium crossbar, palladium crossbar, gold-flashed silver cadmium, silver sadmium oxide, find silver, gold-flashed coin silver.

Expected Mechanical Life: 10 million operations, minimum.

Expected Electrical Life: 100,000 operations, minimum, at rated load.

#### UL/CSA Ratings @ 25°C

Code         Contact Material         Rating           B         Au Flashed AgCd         75VA@24VAC Pilot Duty\$ 1A@120VAC General Purpose 1.5A@50VDC Resistive 600W@277VAC Gen'l. Purpose SPST-NO Only 240W@277VAC Gen'l. Purpose SPST-NO Only 480VA@277VAC Pilot Duty SPDT Only 480VA@Ballast SPDT Only 1/10 HP@120VAC           G         Au Ag         3A@28VDC Resistive 125VA@120VAC Pilot Duty\$ 1/8 HP@120/240 VAC           H         AgCdO         15A@150VAC Inductive 0.4 PF NO Only 10A@277VAC Resistive 15A@28VDC Resistive 15A@28VDC Resistive 15A@28VDC Resistive 175@NO Contacts 600W@277VAC Tungsten SPDT-NO Only 240W@277VAC Tungsten SPDT-NO Only 480VA@277VAC Ballast SPDT Only 1/3 HP@120/240VAC NO 1/6 HP@120/240VAC NO 1/6 HP@120/240VAC NC           K         Au Flashed Coin Ag         5A@240VAC Resistive 5A@28VDC 125VA@240VAC Pilot Duty \$ 126VA@277VAC Resistive 15A@28VDC Resistive 15A@28VDC Resistive 16A@277VAC Resistive 480VA@240VAC Pilot Duty TV2@NC Contacts TV4@NO Contacts TV4@NO Contacts 480W@120VAC Tungsten NO 240W@120VAC Tungsten NC           S         Ag Cd         3A@240VAC Resistive 3A@28VDC Resistive 3A@28V		A Control Material Define					
1A@120VAC General Purpose 1.5A@50VDC Resistive 600W@277VAC Gen'I. Purpose SPST-NO Only 240W@277VAC Gen'I. Purpose SPST-NC Only 480VA@277VAC Pilot Duty SPDT Only 480VA@Ballast SPDT Only 1/10 HP@120VAC  G Au Ag 3A@28VDC Resistive 125VA@120VAC Pilot Duty§ 1/8 HP@120/240 VAC  H AgCdO 15A@150VAC Inductive 0.4 PF NO Only 10A@277VAC Resistive 15A@28VDC Resistive 17V5@NO Contacts TV2@NC Contacts 600W@277VAC Tungsten SPDT-NO Only 240W@277VAC Tungsten SPDT-NC Only 480VA@277VAC Pilot Duty SPDT Only § 480VA@277VAC Ballast SPDT Only 1/3 HP@120/240VAC NO 1/6 HP@120/240VAC NC  K Au Flashed Coin Ag 5A@240VAC Resistive 5A@28VDC 125VA@240VAC Pilot Duty § 15A@28VDC Resistive 16A@28VDC Resistive 16A@277VAC Resistive 16A@277VAC Resistive 16A@277VAC Resistive 16A@28VDC Resistive 16A@28VDC Resistive 16A@28VDC Resistive 16A@28VDC Resistive 16A@277VAC Resistive 16A@28VDC Resistive 16A@28VDC Resistive 16A@277VAC Resistive 16A@28VDC Resistive		Contact iviaterial	_				
125VA@120VAC Pilot Duty\$ 1/8 HP@120/240 VAC	В	Au Flashed AgCd	1A@120VAC General Purpose 1.5A@50VDC Resistive 600W@277VAC Gen'l. Purpose SPST-NO Only 240W@277VAC Gen'l. Purpose SPST-NC Only 480VA@277VAC Pilot Duty SPDT Only 480VA@Ballast SPDT Only				
10A@277VAC Resistive	G	Au Ag	125VA@120VAC Pilot Duty§				
S A@ 28 VDC	Н	AgCdO	10A@277VAC Resistive 15A@28VDC Resistive TV5@NO Contacts TV2@NC Contacts 600W@277VAC Tungsten SPDT-NO Only 240W@277VAC Tungsten SPDT-NC Only 480VA@277VAC Pilot Duty SPDT Only § 480VA@277VAC Ballast SPDT Only 1/3 HP@120/240VAC NO				
15A@28VDC Resistive 10A@277VAC Resistive 480VA@240VAC Pilot Duty TV2@NC Contacts TV4@NO Contacts 480W@120VAC Tungsten NO 240W@120VAC Tungsten NC  S Ag Cd 3A@240VAC Resistive	K	Au Flashed Coin Ag	5A@28VDC 125VA@240VAC Pilot Duty §				
	R	Fine Ag	15A@28VDC Resistive 10A@277VAC Resistive 480VA@240VAC Pilot Duty TV2@NC Contacts TV4@NO Contacts 480W@120VAC Tungsten NO				
S/10201DC HOSIOTIVO	S	Ag Cd	3A@240VAC Resistive 3A@28VDC Resistive				
V Palladium 2A@28VDC Resistive	V	Palladium	2A@28VDC Resistive				

§ Only when Code Y Electrical Spacing is specified.

## Coil Data @ 25°C

Rated Voltage: 3 to 48VDC.

Maximum Voltage @ 85°C: 120% of Rated Voltage.

Between Open Contacts: 500VAC, 60 Hz., 2 seconds.

Between Coil and Contacts: 1,000VAC, 60 Hz., 2 seconds.

Nominal Power @ 25°C: 110mW for 3A and 5A rated models;

240mW for 15A rated models.

Maximum Power @ 25°C: 1W.

**Initial Dielectric Strength** 

Duty Cycle: Continuous.

Initial Insulation Resistance: 10,000 megohms, min., at 25°C, 500VDC

and 50% rel. humidity.

#### Coil Data @ 25°C

Nominal Voltage	DC Resistance in Ohms ±10%		Must Operate Voltage	Must Release Voltage
VDC	3 A & 5A Types	15A Types	VDC	VDC
3	82	38	2.25	0.3
6	327	150	4.5	0.6
9	736	338	6.75	0.9
12	1,309	600	9.0	1.2
18	2,945	1,350	13.5	1.8
24	5,236	2,400	18.0	2.4
28	7,127	3,267	21.0	2.8
48	20,945	9,600	36.0	4.8

#### Operate Data @ 25°C

Must Operate Voltage: 75% of nominal. Must Release Voltage: 10% of nominal.

Operate Time: 10 ms, typ. Release Time: 10 ms, typ.

#### **Environmental Data**

Temperature Range:

Storage: -55°C to +85°C. Operating: -55°C to +85°C.

#### **Mechanical Data**

Termination: Printed circuit terminals.

Enclosures: Unsealed dust cover or sealed plastic case.

Weight: 1.6 oz. (45g) approximately.

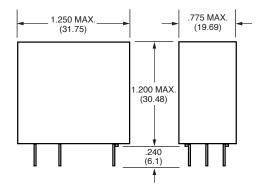


#### **Ordering Information** 3 - 24 60 Q Typical Part Number > 1. Basic Series Type: 60 = Miniature, PC board relay rated 3A or 5A (Contact Material Code G, S, V or B only) 61 = Miniature, PC board relay rated 15A (Contact Material Code H or R only) 65 = Miniature, PC board relay rated 5A (Contact Material Code K only) 2. Contact Arrangement: 1 = 1 Form A (SPST-NO) 2 = 1 Form B (SPST-NC) 3 = 1 Form C (SPDT) 3. Coil Voltage: 3 = 3VDC9 = 9VDC18 = 18VDC28 = 28VDC6 = 6VDC12 = 12VDC24 = 24VDC48 = 48VDC4. Contact Material: G = Au Ag crossbar, rated 3A (Only available with Basic Series Type 60). S = Au Cd crossbar, rated 3A (Only available with Basic Series Type 60). V = Pd crossbar, rated 3A (Only available with Basic Series Type 60). B = Au-flashed AgCd crossbar, rated 5A (Only available with Basic Series Type 60). H = AgCdO, rated 15A (Only available with Basic Series Type 61). R = Fine Ag, rated 15A (Only available with Basic Series Type 61) K = Au-flashed coin Ag, rated 5A (Only available with Basic Series Type 65). 5. Electrical Spacing: Leave Blank = 0.125 in (3.175 mm) Clearance and 0.125 in (3.175 mm) Creepage Y = 0.125 in (3.175 mm) Clearance and 0.250 in (6.35 mm) Creepage 6. Enclosure Type Leave Blank = Unsealed dust cover Q = Sealed cover

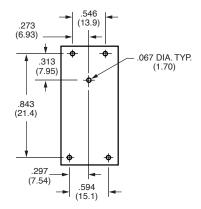
### Our authorized distributors are more likely to stock the following items for immediate delivery.

None at present.

#### **Outline Dimensions**



#### PC Board Layout (Bottom View)



Note: On single throw models, only necessary terminals are present.

1 Form C

#### Disclaimer

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# Wiring Diagrams (Bottom Views)

1 Form B

(SPST-NO) (SPST-NC) (SPDT)

Note: On single throw models, only necessary terminals are present.

1 Form A

## **Mouser Electronics**

**Authorized Distributor** 

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