

| REVISIONS | | | | | |
|-----------|-----|---------------|-----------|-----|------|
| P | LTR | DESCRIPTION | DATE | DWN | APVD |
| | A | INITIAL DRAWN | 19NOV2019 | RV | MB |

Electrical Characteristics

Contact Ratings —

DC resistive — 2 amps at 28 volts (50,000 operations)
1 Amp @ 28 V (100,000 operations)
DC inductive — 0.5 amps at 28 volts, 200 mH
AC resistive — 0.5 amps at 115 volts
AC — 0.125 amps at 115 volts (case grounded)
Low-level — 50 µA at 50 mV
Peak AC or DC

Contact Resistance —

0.050 ohms max.; 0.150 ohms after life test

Life — 100,000 operations at rated loads listed; 1,000,000 operations at low-level loads

Operating Characteristics

Operate Time — 4 ms max.

Release Time — 4 ms max.

Contact Bounce — 1.5 ms

Dielectric Strength —

500 volts rms at sea level;
350 volts rms at 70,000 feet and above

Insulation Resistance — 1,000 megohm min. over temperature range

Environmental Characteristics

Vibration — 30G, to 3000 Hz

Shock — 100 G at 11 ms

Temperature — -65°C to +125°C

Ordering Instructions

Example: The relay selected in the example is a FORM AB .150-grid relay, current calibrated, end bracket mounting with 0.13-inch solder hook header, 210 ohms coil resistance, and 50 mW sensitivity. By choosing the proper code for each of these relay characteristics, the catalog number is 3SBC6131E2. The letter R following sensitivity code indicates relay received 5000 operation miss-test. Ex. 3SBC6131E2R.

Note: Relays specified by catalog numbers (per above directions) are general use items controlled by catalog specifications. Relays to be controlled by customer drawings — or relays having requirements not covered in this publication — will be assigned special catalog numbers upon request.

.150 Grid-space Relays

Type 3SBC (2PDT) Standard

135 mW 2PDT
50 mW (Form AB)
1 PNC–1 PNO

Product Facts

- Low profile... only 0.32 inches high
- Internal diode for coil transient suppression and transistor driven models available
- Qualified to MIL-R-39016/13
- RF designs available

.150 Grid-space

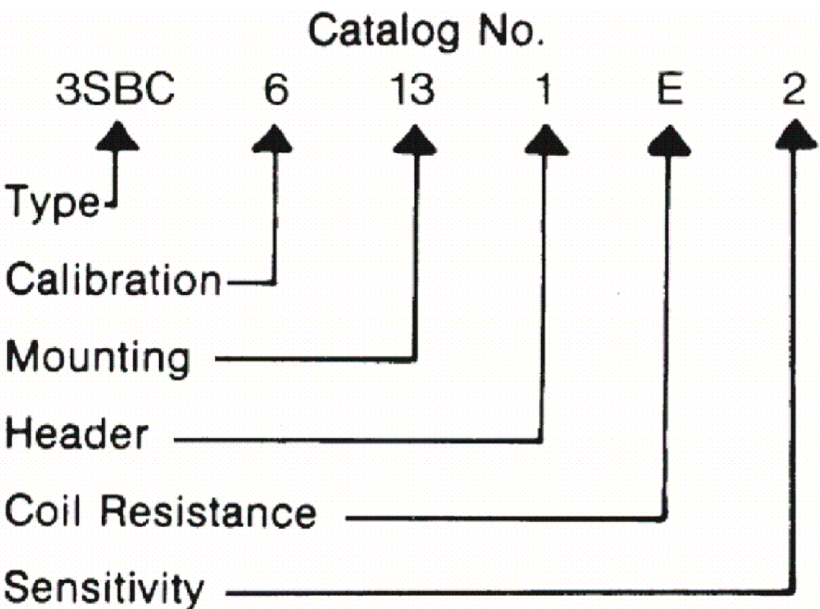
Hybrid Relays

Single Diode, Dual Diode
Type 3SBC (2PDT)

135 mW

Product Facts

- Low profile... only 0.32 inches high
- 50 milliwatt forms available
- Qualified to MIL-R-39016/37
- Qualified to MIL-R-39016/38
- RF designs available



| | | | | | | | |
|--|--|--|-----|-----------|------------------|-----------|---------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DWN | RV | 19NOV2019 | TE Connectivity | | |
| | | CHK | RV | 19NOV2019 | | | |
| | | APVD | MB | 19NOV2019 | NAME | | |
| DIMENSIONS: INCHES | | TOLERANCES UNLESS OTHERWISE SPECIFIED: | | | 3SBC–SERIES | | |
| | | 0 PLC | ± – | | — | | |
| | | 1 PLC | ± – | | — | | |
| | | 2 PLC | ± – | | — | | |
| | | 3 PLC | ± – | | — | | |
| | | 4 PLC | ± – | | — | | |
| | | ANGLES | ± – | | — | | |
| MATERIAL | | FINISH | | | SIZE | CAGE CODE | DRAWING NO |
| — | | — | | | A3 | — | ©=3SBC–SERIES |
| | | | | | RESTRICTED TO | | |
| | | | | | — | | |
| | | | | | CUSTOMER DRAWING | | |
| | | | | | SCALE | SHEET | REV |
| | | | | | NTS | 1 OF 3 | A |

THIS DRAWING IS UNPUBLISHED.

RELEASED FOR PUBLICATION

© COPYRIGHT — TE Connectivity Ltd.

ALL RIGHTS RESERVED.

REVISIONS

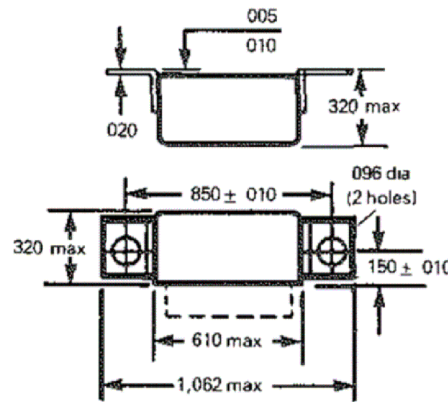
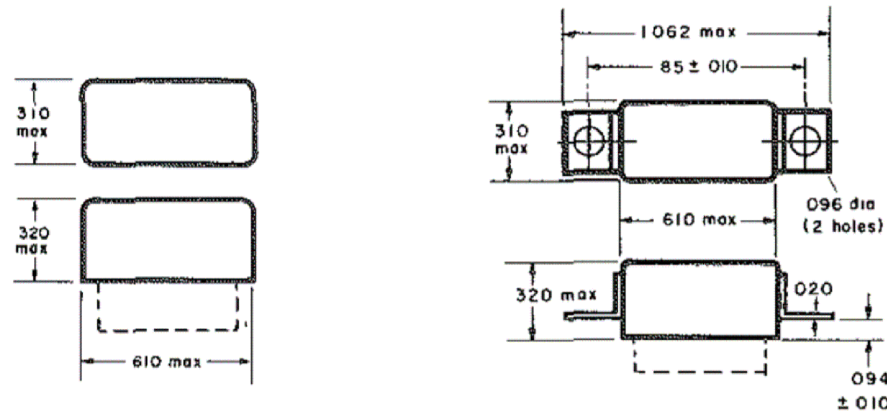
| P | LTR | DESCRIPTION | DATE | DWN | APVD |
|---|-----|-------------|------|-----|------|
| | — | SEE SHEET 1 | — | — | — |

Mounting Forms
(3SBC, 3SCC)

(Vibration note with each
form is acceleration from
55 to 3000 Hz)

All dimensions in inches

| TOLERANCES (Unless otherwise specified) | |
|--|---------|
| Hundredths | ± 0 020 |
| Thousandths | ± 0 005 |



No Mount

| Mounting Code | Vibration |
|---------------|-----------|
| 00 | 30g |

*Assumes relay held securely by potting or
other means

End Bracket

| Mounting Code | Vibration |
|---------------|-----------|
| 13 | 30g |

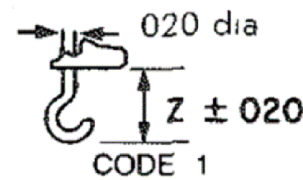
Side Bracket

| Mounting Code | Vibration |
|---------------|-----------|
| 25 | 30g |

Header and Connection
Diagrams

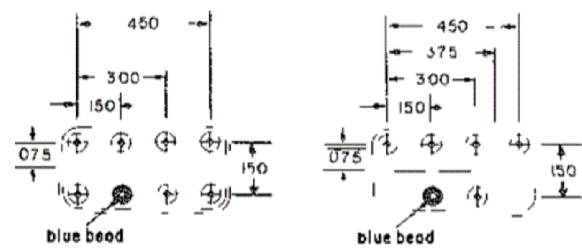
Header Types

| TYPE | Z DIMENSION | HEADER CODE |
|-------------|----------------|----------------|
| Solder hook | 0 13 | 1 |

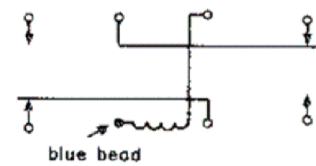


CODE 1, 5, & 6

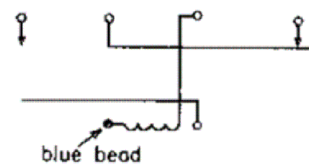
CODE 2



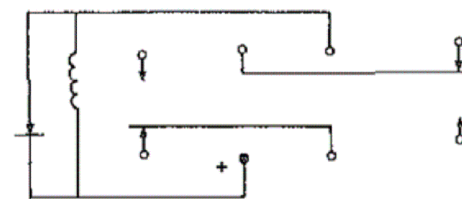
Terminal View



CODE 1

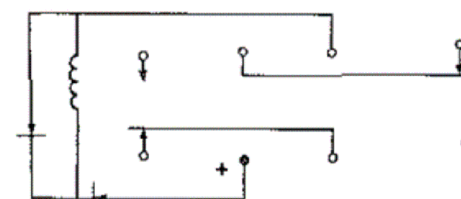


CODE 2



CODE 5

SINGLE DIODE



CODE 6

DUAL DIODE

Electrical Characteristics

Contact Ratings —

DC resistive — 2 amps at 28 volts
(50,000 operations)

1 Amp @ 28 V (100,000 operations)

DC inductive — 0.5 amps at 28 volts,
200 mH

AC resistive — 0.5 amps at 115 volts

AC — 0.125 amps at 115 volts (case
grounded)

Low-level — 50 µA at 50 mV

Peak AC or DC

Contact Resistance —

0.050 ohms max.; 0.150 ohms after life
test

Life — 100,000 operations at rated
loads listed; 1,000,000 operations at
low-level loads

.150 Grid-space
Hybrid Relays

Single Diode, Dual Diode

Type 3SBC (2PDT)

135 mW

Product Facts

- Low profile... only
0.32 inches high
- 50 milliwatt forms available
- Qualified to MIL-R-39016/37
- Qualified to MIL-R-39016/38
- RF designs available

Operating Characteristics

Operate Time — 4 ms max.

Release Time — 6 ms max.

Contact Bounce — 1.5 ms

Dielectric Strength (Note 1) —

500 volts rms at sea level;
350 volts rms at 70,000 feet and above

Insulation Resistance (Note 1) —

1,000 megohm min. over temperature
range

Environmental Characteristics

Vibration — 30G, to 3000 Hz

Shock — 100 G at 11 ms

Temperature — -65°C to +125°C

Semiconductor Characteristics
at 25°C


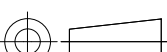
Diode —

Max. Negative Transient — 1.0 volt

Breakdown Voltage — 100 VDC @ 10 µA

Max. Leakage Current — 1 µA @ 50 VDC

ALL DIMENSIONS ARE IN INCHES

| | | | | | | | | | |
|---|--|------------------|-----------|---|-----|---------------|-----------|------------|---------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DWN RV | 19NOV2019 | <div>TE Connectivity</div> | | | | | |
| | | CHK RV | 19NOV2019 | | | | | | |
| | | APVD MB | 19NOV2019 | | | | | | |
| DIMENSIONS: INCHES | TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± — 1 PLC ± — 2 PLC ± — 3 PLC ± — 4 PLC ± — ANGLES ± — | PRODUCT SPEC | | NAME 3SBC—SERIES — — | | | | | |
|  | | — | | | | | | | |
| | | APPLICATION SPEC | | | | | | | |
| | | — | | | | | | | |
| | | MATERIAL | FINISH | WEIGHT | — | SIZE | CAGE CODE | DRAWING NO | RESTRICTED TO |
| — | — | | | A3 | — | ©-3SBC—SERIES | — | | |
| CUSTOMER DRAWING | | | | SCALE | NTS | SHEET | 3 OF 3 | REV | A |

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[3SBC1614A2](#)