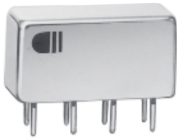
Double Pole, Electrically Held, 2 Amps and Less

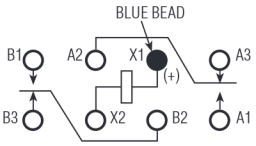
HFW, HMB, HMS

HFW

Standard Half Size High Performance Relay

Qualified to MIL-R-39016/6





Terminal View

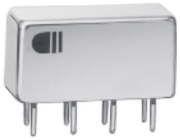
Product Facts

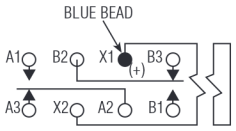
- Hermetically sealed
- Up to 2 amps switching
- High shock & vibration ratings
- Optional terminals & mounting styles
- Excellent RF switching

HMB

Bifilar Half Size High Performance Relay

Qualified to MIL-R-39016/22





Terminal View

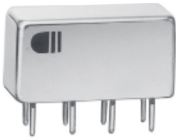
Product Facts

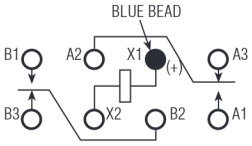
- Hermetically sealed
- Up to 2 amps switching
- High shock & vibration ratings
- Optional terminals & mounting styles
- Excellent RF switching

HMS

Sensitive Half Size High Performance Relay

Qualified to MIL-R-39016/44





Terminal View

Product Facts

- Hermetically sealed
- Up to 2 amps switching
- High shock & vibration ratings
- Optional terminals & mounting styles
- Excellent RF switching

Electrical Characteristics

Contact Arrangement —
2 Form C (DPDT)

Contact Material —
Stationary —
Hardened silver alloy
Moveable —
Gold plated hardened silver alloy

Contact Resistance —
Before Life — 50 milliohms max.
(measured at 10 mA @ 6 Vdc)
After Life — 100 milliohms max.
(measured @ 2 A @ 28 Vdc)

Mechanical Life Expectancy —
50 million operations

Coil Voltage —
5 to 48 Vdc (HFW)
6 to 26.5 Vdc (HMB)
5 to 36 Vdc (HMS)

Coil Power — 1.4 watts max. @ 25°C

Duty Cycle — Continuous

Pick-up Voltage — Approximately 50% of nominal coil voltage

Pick-up Sensitivity @ 25°C —
145 to 260 mW (HFW)
325 mW (HMB)
100 to 125 mW (HMS)

Contact Ratings

Contact Load	Type	Operations Min.
2 A @ 28 Vdc	Resistive	100,000
0.75 A @ 28 Vdc	Inductive (200mH)	100,000
0.1 A @ 115 Vac, 60 Hz & 400 Hz	Resistive	100,000
0.3 A @ 115 Vac, 60 Hz & 400 Hz	Resistive	100,000
0.1 A @ 28 Vdc	Intermediate	50,000
0.160 A @ 28 Vdc	Lamp	100,000
30 µA @ 50 mVdc	Low Level	1,000,000

RF Performance

Frequency (MHz)	RF Losses (dB)	VSWR	Isolation (dB)
100	0.1	1.17:1	40
500	0.3	1.19:1	28
1000	0.4	1.19:1	23

Double Pole, Electrically Held, 2 Amps and Less (Continued)

HFW, HMB, HMS (Continued)

Operating Characteristics

Timing —
Operate Time —
4.0 ms max. (HFW)
5.0 ms max. (HMB)
6.0 ms max. (HMS)
Release Time —
4.0 ms max. (HFW)
5.0 ms max. (HMB/HMS)

Contact Bounce — 2.0 ms max.

Dielectric Withstanding Voltage — Between Open Contacts —
500 Vrms 60 Hz
Between Adjacent Contacts —
1000 Vrms 60 Hz
Between Contacts & Coil —
1000 Vrms 60 Hz

Insulation Resistance —
10,000 megohms min. @ 500 Vdc

Environmental Characteristics

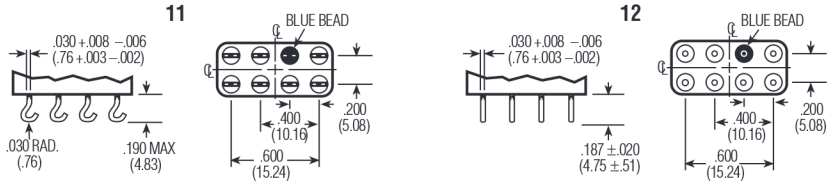
Temperature Range —
-65°C to +125°C

Weight — 0.46 oz. (13 gms max.)

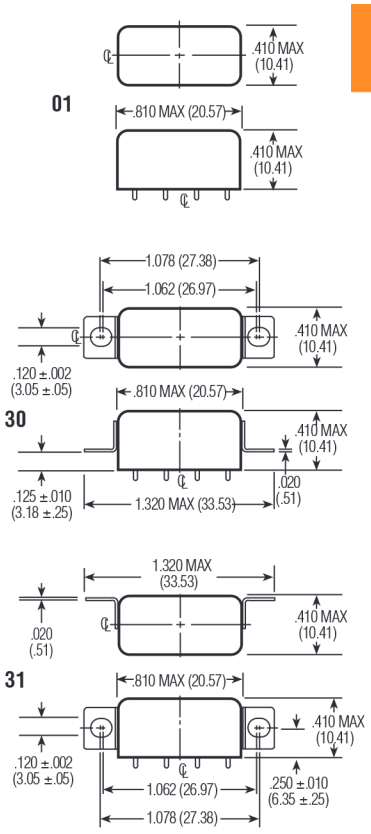
Vibration Resistance — HFW/HMB/HMS —
Standard — 20 G's, 10 to 2,000 Hz
HFW/HMB —
QPL — 30 G's, 10 to 3,000 Hz
HMS —
QPL — 20 G's, 10 to 2,500 Hz

Shock Resistance —
100 G's, 6 ±1 ms
50 G's, 11 ±1 ms (HMS)

QPL Approval —
MIL-R-39016/6 (HFW)
MIL-R-39016/22 (HMB)
MIL-R-39016/44 (HMS)



Terminals



Mounting Styles

Standard Coil Data

	Nom. Coil Voltage (Vdc)	Coil Resistance in Ohms ±10% @ 25°C	Pickup Voltage Vdc (Max.) @ 25°C	Pickup Voltage Vdc (Min.) @ 125°C	Drop-out Voltage Vdc (Min.) @ 25°C	Drop-out Voltage Vdc (Min.) @ -65°C	Nom. Coil Power (mW) @ 25°C	Max. Coil Voltage	Coil Desig.
HFW	5.0	27	2.7	3.8	0.29	0.21	926	6.0	L
	6.0	40	3.2	4.5	0.35	0.25	900	7.5	F
	12.0	160	6.4	9.0	0.7	0.5	900	15.0	G
	26.5	700	13.5	18.0	1.5	1.0	1003	32.0	K
HMB	6.0	40	3.6	4.8	0.35	0.25	900	7.5	F
	12.0	160	7.2	9.6	0.7	0.5	900	15.0	G
	26.5	700	15.0	20.0	1.5	1.0	1003	32.0	K
HMS	5.0	47	2.2	3.2	0.21	0.12	532	7.0	S001
	6.0	75	2.75	4.0	0.27	0.17	480	9.0	S002
	12.0	310	5.6	8.0	0.55	0.35	465	20.0	S003
	26.5	1,030	11.4	16.5	1.1	0.7	682	35.0	S004
	30.0	1,620	14.3	21.0	1.4	0.9	556	44.0	S005
	36.0	2,640	18.0	26.0	1.8	1.1	491	56.0	S006
Other	6-8	60	3.5	4.85	0.35	0.22	817	9.0	A
(avail. for HFW	12-15	320	6.8	9.42	0.68	0.44	570	21.0	B
relays only)	18.0	520	9.5	13.16	0.95	0.62	623	27.0	J
	26.5-32	1,250	14.0	19.4	1.5	0.98	684	42.0	D
	40.0	2,700	21.3	29.5	2.1	1.37	593	61.0	H
	48.0	3,500	25.5	35.3	2.5	1.63	658	70.0	E

Specifying a Part Number Example:

Type	Terminals	Mountings	Coils	Features
HFW	12	30	K	00 (n/a HMS)

* The part number example shown on this page is for catalog items. For a list of specific QPL part numbers, please see the index in Section 15.

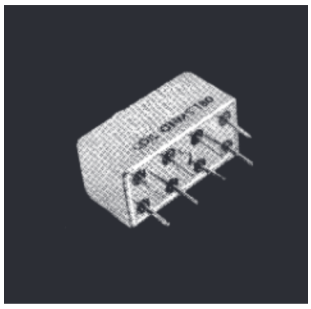
Double Pole, Electrically Held, 2 Amps and Less (Continued)

Long-life Half size Industrial Relay

Type 3SCV (2PDT)

Product Facts

- **100,000,000 operations at low-level**
- **Hermetic seal**



The 3SCV is an exceptionally long life relay for low level applications which is designed for industrial applications such as business machines and computer peripheral equipment. The design is such that the phenomenon of sticking contacts is all but eliminated. Because of its low contact resistance and its ability to handle overloads the 3SCV relay is well suited for applications which have previously required reed devices.

Electrical Characteristics

Contacts — 2 Form C

Contact Resistance — 0.050 ohms; 0.100 ohms after life test

Life — 10^5-2A 28 volts DC, 115 volts AC (not grounded, resistive)
0.5A
Low-level — 100,000,000 operations — 50 µA at 50 mV Peak AC or DC

Sensitivity — 340 mW

Operating Characteristics

Operate Time — 6 ms max.

Release Time — 4 ms max.

Contact Bounce — 2 ms max.

Enclosure — All welded, hermetically sealed

Terminals — Weldable and solderable

Dielectric Strength — 500 volts rms at sea level

Insulation Resistance — 1,000 megohm min.

Environmental Characteristics

Weight — 0.30 oz.

Vibration — 10G, 10-2000 Hz

Shock — 50 G 6ms, 1/2 sine

Temperature — -14°C to +125°C

See page 1-39 for Mounting Forms, Terminals and Circuit Diagrams.

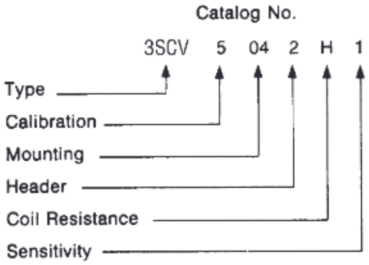
Coil Table (All Values DC)* 340 mW Sensitivity: (Code 1)

Coil Code Letter	Coil Resistance at 25C (ohms)	Voltage Calibrated, CODE: 5			
		Suggested Source Volts†	Maximum Operate Volts at 25C	Release Voltage Range at 25C	
				Max	Min
A	47 ± 10%	4.8-7	3.9	2.7	.43
B	75 ± 10%	6.1-9	4.9	3.4	.5
C	120 ± 10%	7.7-12	6.3	4.4	.69
D	180 ± 10%	9.5-15	7.7	5.4	.85
E	310 ± 10%	12.5-20	10.1	7.0	1.1
F	440 ± 10%	15.0-23	12.0	8.4	1.3
H	700 ± 10%	20.0-30	15.5	10.9	1.7
K	1030 ± 10%	24.0-35	18.5	12.9	2.0
L	1620 ± 10%	30.0-44	23.1	16.2	2.5
M	2640 ± 10%	39.0-56	29.5	20.68	3.2

Ordering Instructions

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

Example: The relay selected in this example is a 2PDT half size relay, voltage calibrated, two-hole side bracket mounting, solder hook header, 700 ohms coil resistance, and 340 mW sensitivity. By choosing the proper code for each of these relay characteristics, the catalog number is identified as 3SCV5042H1. The letter R following sensitivity code indicates relay received 5000 operation miss-test. Ex. 3SCV5042H1R.



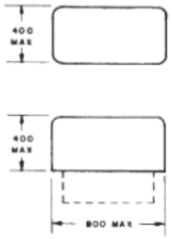
Double Pole, Electrically Held, 2 Amps and Less (Continued)

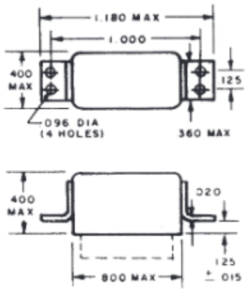
Mounting Forms (3SCV)

No Mount

Mounting Code
00

* Assumes relay held securely by potting or other means.



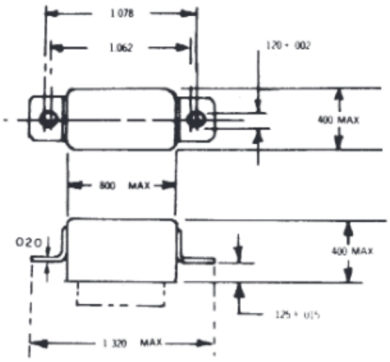


All dimensions in inches

TOLERANCES	
(Unless otherwise specified)	
Hundredths	±0.020
Thousandths	±0.005

Four-hole End Bracket

Mounting Code
01

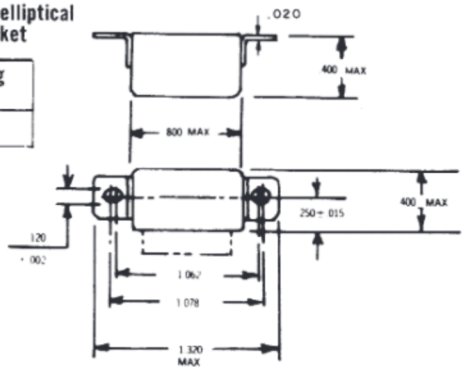


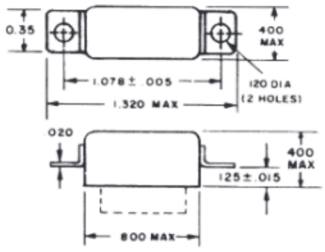
Two-hole elliptical END bracket

Mounting Code
53

Two-hole elliptical Side Bracket

Mounting Code
54



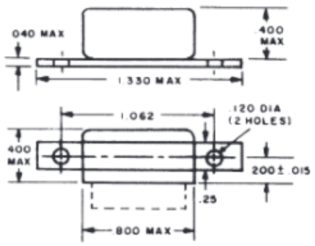


Two-hole End Bracket

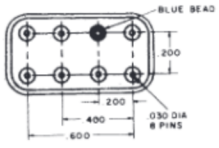
Mounting Code
13

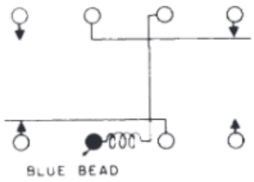
Two-hole Side Bracket

Mounting Code
04



Header and Connection Diagrams





Header Types

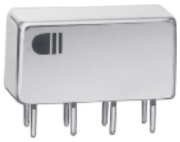
Type	Z Dim.	Header Code
Solder hook	0.16	2
Straight pin (socket or PCB type)	0.19	4

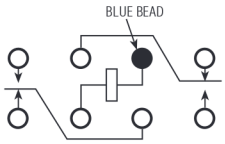
CODE: 2

CODES: 4

Double Pole, Electrically Held, 2 Amps and Less (Continued)

HFC
Commercial/Industrial Half Size Relay





Terminal View

Product Facts

- Hermetically sealed
- Up to 2 amps switching
- Economical configuration
- Optional terminals & mounting styles

Electrical Characteristics

Contact Arrangement — 2 Form C (DPDT)

Contact Material — Stationary — Bifurcated hardened silver alloy Moveable — Gold plated hardened alloy

Contact Resistance — Before Life — 50 milliohms max. (measured at 10 mA @ 6 Vdc) After Life — 100 milliohms max. (measured @ 2 A @ 28 Vdc)

Mechanical Life Expectancy — 10 million operations

Coil Voltage — 5 to 26.5 Vdc

Coil Power — 1.4 watts max. @ 25°C

Duty Cycle — Continuous

Pick-up Voltage — Approximately 60% of nominal coil voltage

Pick-up Sensitivity — 360 mW

Operating Characteristics

Timing — Operate Time — 6.0 ms max. Release Time — 6.0 ms max.

Dielectric Withstanding Voltage — Between Open Contacts — 350 Vrms 60 Hz Between Adjacent Contacts — 500 Vrms 60 Hz Between Contacts and Coil — 500 Vrms 60 Hz

Insulation Resistance — 1,000 megohms min @ 500 Vdc

Environmental Characteristics

Temperature Range — -55°C to +85°C

Weight — 0.46 oz. (13 gms) max.

Vibration Resistance — 10 G's, 10 to 500 Hz

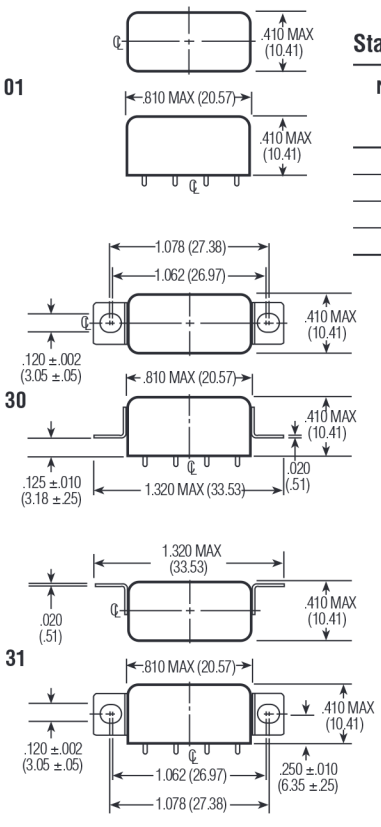
Shock Resistance — 30 G's, 6 ±1 ms

Contact Ratings

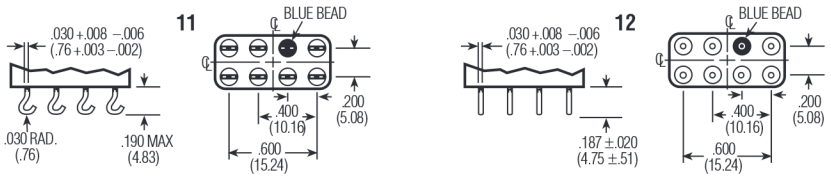
Contact Load	Type	Operations Min.
2 A @ 28 Vdc	Resistive	100,000
0.75 A @ 28 Vdc	Inductive (200 mH)	100,000
0.3 A @ 115 Vac, 60 Hz & 400 Hz	Resistive	100,000

Standard Coil Data

Nom. Coil Voltage (Vdc)	Coil Resistance in Ohms ± 20% @ 25°C	Pickup Voltage Vdc (Max.) @ 25°C	Pickup Voltage Vdc (Max.) @ 85°C	Nom. Coil Power (W) @ 25°C	Max. Coil Voltage	Coil Desig.
5.0	27	3.0	3.7	.92	6.0	L
6.0	40	3.6	4.5	.90	7.5	F
12.0	160	7.2	8.9	.90	15.0	G
26.5	700	16.0	19.7	1.00	32.0	K



Mounting Styles



Terminals

Ordering Instructions

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

Specifying a Part Number Example:

Type	Terminals	Mountings	Coils	Features
HFC	12	30	K	00

Double Pole, Electrically Held, 2 Amps and Less (Continued)

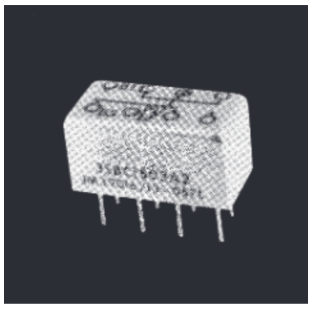
.150 Grid-space Relays

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**



The .150 Grid-space relay — only 0.32 inches high — saves space in electronic packaging. The pin spacing allows you to insert the relay with no intermediate pin spreaders as well as meet applicable military specifications.

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

See page 1-44 for Mounting Forms, Terminals and Circuit Diagrams.

Coil Table Type 3SBC (All Values DC)*2PDT, 135 mW Sensitivity: (Code 1)

Coil Code Letter	Coil Resistance @ 25C (ohms)	Voltage Calibrated, Code 5					Current Calibrated, Code 6		
		Suggested Source Volts†	Max. Operate Volts @ 25C	Release Voltage Range @ 25C		Max. Continuous Current @ 125C (mA)	Max. Operate Current @ 25C (mA)	Release Current Range @ 25C (mA)	
				Max.	Min.			Max.	Min.
A	44 ± 10%	3.5-6.2	2.4	1.45	0.26	87.0	54.5	32.7	6.00
B	56 ± 10%	4.0-7.0	2.7	1.6	0.3	77.0	48.3	28.6	5.30
D	140 ± 10%	6.4-12.0	4.4	2.6	0.5	50.3	31.4	18.5	3.60
E	210 ± 10%	8.0-16.0	5.4	3.2	0.6	40.0	25.7	15.4	2.80
L	650 ± 10%	13.6-24.0	9.5	5.6	1.0	22.9	14.3	8.6	1.54
K	1350 ± 10%	20.0-35.0	13.5	8.1	1.5	15.5	10.0	6.0	1.10
N	2245 ± 10%	26.0-46.0	17.1	10.5	1.9	12.0	7.6	4.7	0.84

Coil-Data (All Values DC)* Type 3SBC Form AB 50 mW Sensitivity non mil spec: (Code 2)

Coil Code Letter	Coil Resistance @ 25C (ohms)	Voltage Calibrated, Code 5					Current Calibrated, Code 6		
		Suggested Source Volts†	Max. Operate Volts @ 25C	Release Voltage Range @ 25C		Max. Continuous Current @ 125C (mA)	Max. Operate Current @ 25C (mA)	Release Current Range @ 25C (mA)	
				Max.	Min.			Max.	Min.
B	56 ± 10%	2.6-7.0	1.8	1.1	0.16	46.5	29.1	18.2	3.30
C	85 ± 10%	3.3-9.5	2.3	1.4	0.20	38.7	24.2	15.1	2.70
D	140 ± 10%	4.3-12.0	2.9	1.8	0.27	30.4	19.0	11.9	2.10
E	210 ± 10%	5.3-14.0	3.6	2.2	0.33	24.8	15.5	9.7	1.75
F	360 ± 10%	6.7-19.0	4.5	2.8	0.41	18.9	11.8	7.2	1.30
G	510 ± 10%	8.2-23.0	5.6	3.5	0.51	15.8	9.9	6.2	1.10
H	775 ± 10%	10.0-26.0	6.8	4.2	0.62	12.8	8.0	5.0	0.90
K	1350 ± 10%	13.2-35.0	9.0	5.6	0.82	9.8	6.1	3.8	0.68
N	2245 ± 10%	16.8-46.0	11.4	7.1	1.00	7.4	4.6	2.9	0.52

*Values listed are factory test and inspection data. User should allow for meter variations.
†At nominal resistance plus 10%. ‡Applicable over the operating temperature range in circulating air.

See Page 1-42 for ordering instructions.

* The part number example shown on this page is for catalog items. For a list of specific QPL part numbers, please see the index in Section 15.

Double Pole, Electrically Held, 2 Amps and Less (Continued)

.150 Grid-space Hybrid Relays

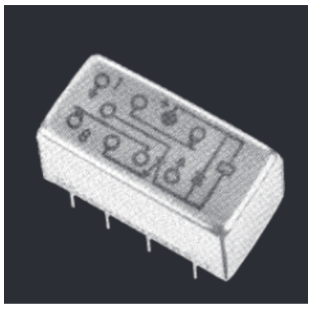
Single Diode, Dual Diode

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**



The hybrid .150 Grid-space relay — only 0.32 inches high — saves space in electronic packaging. The pin spacing allows you to insert the relay with no intermediate pin spreader.

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 — 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

See page 1-44 for Mounting Forms, Terminals and Circuit Diagrams.

Coil Table Single Diode (All Values DC)*(2DPT), 135 mW Sensitivity: (Code 5)

Coil Code Letter	Coil Resistance @ 25C (ohms)	Voltage Calibrated, Code 5				Current Calibrated, Code 6			
		Suggested Source Volts†	Max. Operate Volts @ 25C	Release Voltage Range @ 25C		Max. Continuous Current @ 125C (mA)	Max. Operate Current @ 25C (mA)	Release Current Range @ 25C (mA)	
				Max.	Min.			Max.	Min.
A	44 ± 10%	3.5- 6.2	2.4	1.45	0.26	87.0	54.5	32.7	6.00
B	56 ± 10%	4.0- 7.0	2.7	1.6	0.3	77.0	48.3	28.6	5.30
D	140 ± 10%	6.4-12.0	4.4	2.6	0.5	50.3	31.4	18.5	3.60
E	210 ± 10%	8.0-16.0	5.4	3.2	0.6	40.0	25.7	15.4	2.80
L	650 ± 10%	13.6-24.0	9.5	5.6	1.0	22.9	14.3	8.6	1.54
K	1350 ± 10%	20.0-35.0	13.5	8.1	1.5	15.5	10.0	6.0	1.10
N	2245 ± 10%	26.0-46.0	17.1	10.5	1.9	12.0	7.6	4.7	0.84

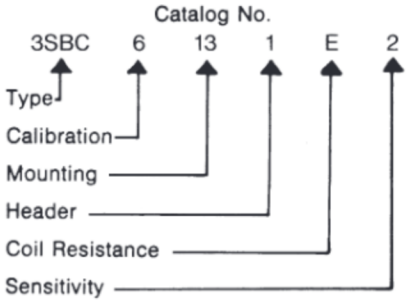
Coil Table Dual Diode (All Values DC)*(2DPT), 135 mW Sensitivity: (Code 6)

	**								
A	44 ± 10%	3.9- 7.0	3.4	2.0	0.37	98.2	77.3	45.5	8.4
B	56 ± 10%	4.6- 8.0	3.7	2.2	0.41	89.8	66.1	39.3	7.1
D	140 ± 10%	7.8-12.0	5.4	3.2	0.6	52.4	38.6	22.9	4.3
E	210 ± 10%	9.3-16.0	6.4	3.8	0.7	41.4	30.5	18.1	3.3
L	650 ± 10%	15.0-24.0	10.5	6.2	1.1	23.6	16.2	9.5	1.7
K	1350 ± 10%	21.0-35.0	14.5	8.7	1.6	16.0	10.7	6.4	1.2
N	2245 ± 10%	27.0-46.0	18.1	10.9	2.0	12.1	8.1	4.9	0.9

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.



* The part number example shown on this page is for catalog items. For a list of specific QPL part numbers, please see the index in Section 15.

Double Pole, Electrically Held, 2 Amps and Less (Continued)

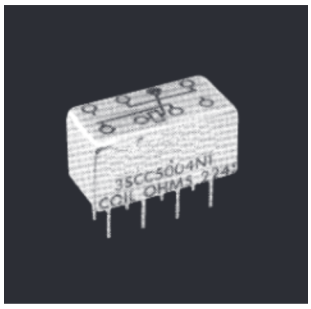
.150 Grid-space Long-life Relays

Type 3SCC (2PDT)

170 mW

Product Facts

- 100,000,000 operations low-level signal loads
- RF designs available
- Low profile — 0.32 height
- Hermetic seal
- High reliability
- Performance tested



The .150 Grid relay, the smallest (.320 inches high) 2 Amp rated relay available in commercial and military qualified models, is now available in the long life version. Capable of over 100,000,000 mechanical operations at low level and signal load, the .150 Grid relay provides the simplicity of relays for circuit design, the low circuit resistance of precious metal contact systems, and the long life processing that has made CII relays the standard for quality and reliability.

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 — -40°C to +125°C

See page 1-44 for Mounting Forms, Terminals and Circuit Diagrams.

Coil Table Type 3SCC (All Values DC)* 2 PDT Relay — 170mW Sensitivity: (Code 1)

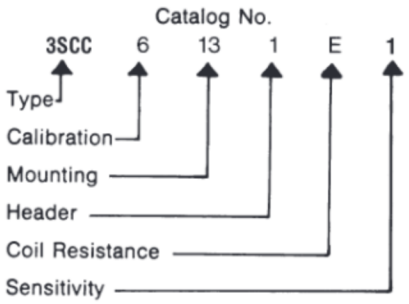
Coil Code Letter	Coil Resistance @ 25C (ohms)	Voltage Calibrated, Code 5				Current Calibrated, Code 6			
		Suggested Source Volts†	Max. Operate Volts @25C	Release Voltage Range @ 25C		Max. Continuous Current @ 125C (mA)	Max. Operate Current @ 25C (mA)	Release Current Range @ 25C (mA)	
				Max.	Min.			Max.	Min.
A	44 ± 10%	3.5- 6.2	2.7	1.45	0.26	87.0	61.4	32.7	6.00
B	56 ± 10%	4.0- 7.0	3.1	1.6	0.3	77.0	55.4	28.6	5.30
D	140 ± 10%	6.4-12.0	4.9	2.6	0.5	50.3	35.0	18.5	3.60
E	210 ± 10%	8.0-16.0	5.9	3.2	0.6	40.0	28.0	15.4	2.80
L	650 ± 10%	13.6-24.0	10.5	5.6	1.0	22.9	16.2	8.6	1.54
K	1350 ± 10%	20.0-35.0	15.1	8.1	1.5	15.5	11.2	6.0	1.10
N	2245 ± 10%	26.0-46.0	19.5	10.5	1.9	12.0	8.7	4.7	0.84

*Values listed are factory test and inspection data. User should allow for meter variations.
†Applicable over the operating temperature range in circulating air.

Ordering Instructions

Example: The relay selected in the example is a 2PDT .150-grid relay, current calibrated, end bracket mounting with 0.13-inch solder hook header, 210 ohms coil resistance, and 175 mW sensitivity. By choosing the proper code for each of these relay characteristics, the catalog number is 3SCC6131E1. The letter R following sensitivity code indicates relay received 5000 operation miss-test. Ex. 3SCC6131E1R.

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.



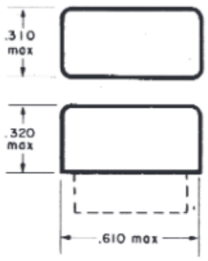
Double Pole, Electrically Held, 2 Amps and Less (Continued)

Mounting Forms (3SBC, 3SCC)

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

All dimensions in inches

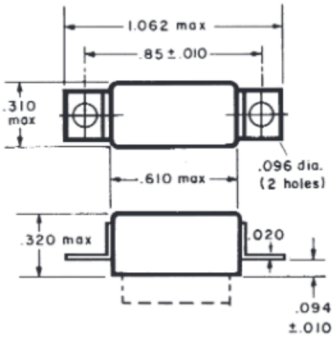
TOLERANCES (Unless otherwise specified)	
Hundredths	±0.020
Thousandths	±0.005



No Mount

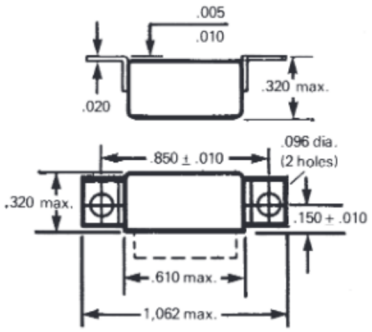
Mounting Code	Vibration
00	30g

*Assumes relay held securely by potting or other means



End Bracket

Mounting Code	Vibration
13	30g



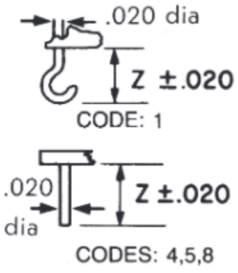
Side Bracket

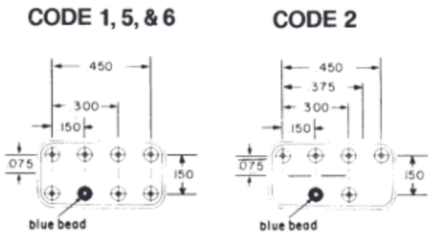
Mounting Code	Vibration
25	30g

Header and Connection Diagrams

Header Types

TYPE	Z DIMENSION	HEADER CODE
Solder hook	0.13	1
Straight pin	0.12	8
Straight pin	0.19	4
Straight pin	0.25	5





Terminal View