\bigcirc	TC 0	

D

С

В

А

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 arounded)

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

RELEASED FOR PUBLICATIO

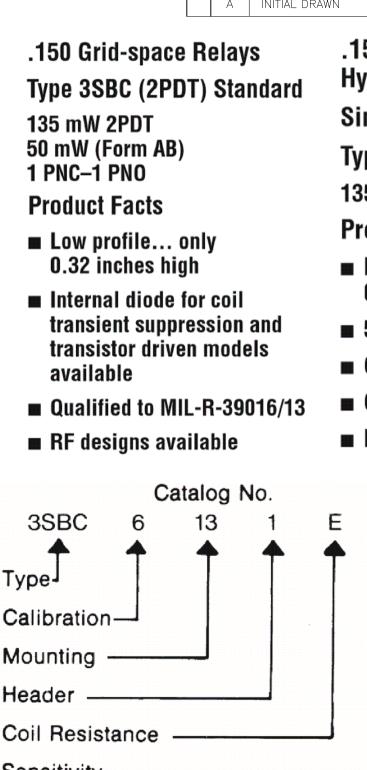
ALL RIGHTS RESERVED

Example: The relay se example is a FORM AE relay, current calibrate bracket mounting with solder hook header, 21 resistance, and 50 mW By choosing the prope each of these relay cha the catalog number is 3SBC6131E2. The lette sensitivity code indicat received 5000 operation Ex. 3SBC6131E2R. Note: Relays specified

3

- . -

numbers (per above d general use items cont alog specifications. Re controlled by custome or relays having requir covered in this publica be assigned special c bers upon request.



	2) -		1	
			REVISIONS		
		P LTR	DESCRIPTION		PVD
		A INITIAL	DRAWN	19NOV2019 RV M	B
elected in the 3 .150-grid d, end 0.13-inch 10 ohms coil / sensitivity. er code for aracteristics, er R following	Type 3SBC 135 mW 2PD 50 mW (Form 1 PNC-1 PNC Product Fac Low profil 0.32 inche Internal di transient s transistor available Qualified t	n AB) o cts e only es high iode for coil suppression and driven models to MIL-R-39016/13	Single Diode, Type 3SBC (2F 135 mW Product Facts Low profile 0.32 inches h 50 milliwatt f Qualified to N 3 Qualified to N	Dual Diode PDT) igh orms available AIL-R-39016/37 AIL-R-39016/38	
es relay	RF design	s available	RF designs a	vallable	
on miss-test. d by catalog lirections) are trolled by cat- elays to be r drawings — ements not ation — will atalog num-	Calibration Mounting — Header — Coil Resistance		E 2		
	Sensitivity —				
THIS DRAWING IS A CO DIMENSIONS: INCHES	DNTROLLED DOCUMENT. TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± - 1 PLC ± -	DWN 19NOV2015 RV CHK 19NOV2015 RV APVD 19NOV2015 MB PRODUCT SPEC	Image: NAME	TE Connectivity C-SERIES -	
	2 PLC ± – 3 PLC ± – 4 PLC ± –	APPLICATION SPEC			
MATERIAL	ANGLES ± - FINISH	WEIGHT	$A_3 - C = 3SBC$		
-	_	CUSTOMER DRAWING			
					<u> </u>

D

(

В

. –

3

2

Suggested

Source

Volts†

3.5-6.2

4.0-7.0

6.4-12.0

8.0-16.0

13.6-24.0

20.0-35.0

26.0-46.0

Suggested

Source

Volts†

2.6-7.0

3.3-9.5

4.3-12.0

5.3-14.0

6.7-19.0

8.2-23.0

10.0-26.0

13.2-35.0

Coil

Resistance

@ 25C

(ohms)

 $44 \pm 10\%$

 $56 \pm 10\%$

 $140 \pm 10\%$

 $210 \pm 10\%$

 $650 \pm 10\%$

 $1350\pm10\%$

 $2245 \pm 10\%$

Coil

Resistance

@ 25C

 $56 \pm 10\%$

 $85 \pm 10\%$

 $140 \pm 10\%$

 $210 \pm 10\%$

 $360 \pm 10\%$

 $510 \pm 10\%$

 $775 \pm 10\%$

 $1350 \pm 10\%$

2245 ± 10%

(ohms)

Coil

Code

Letter

A

В

D

E

N

Coil

Code

Letter

В

С

Ď

Е

F

G

н

K

N

LTR SEE SHEET 1 _

Voltage Calibrated, Code 5

Max.

1.45

1.6

2.6

3.2

5.6

8.1

10.5

Voltage Calibrated, Code 5

Max.

1.1

1.4

1.8

2.2

2.8

3.5 4.2

5.6

7.1

Release Voltage

Range @ 25Č

Max.

Operate

Volts

@ 25C

2.4

2.7

4.4

5.4

9.5

13.5

17.1

Max.

Operate

Volts

@ 25C

1.8

2.3

2.9

3.6

4.5

5.6

6.8

9.0

11.4

Release Voltage

Range @ 25C

Min.

0.26

0.3

0.5

0.6

1.0

1.5

1.9

Min.

0.16

0.20

0.27

0.33

0.41

0.51

0.62

0.82

1.00

(C) COPYRIGHT -TE Connectivity Ltd.

4

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

			Voltage	Calibrated	d, Code 5		Current C	alibrated, C	ode 6
Coil	Coil Resistance	Suggested	Max. Operate	Release Range	U 1	Max. Continuous	Max. Operate		e Current 25C (mA)
Code Letter	@ 25C (ohms)	Source Volts†	Volts @ 25C	Max.	Min.	Current @ 125C (mA)	Current @ 25C (mA)	Max.	Min.
А	$44 \pm 10\%$	3.5-6.2	2.4	1.45	0.26	87.0	54.5	32.7	6.00
В	56 ± 10%	4.0-7.0	2.7	1.6	0.3	77.0	48.3	28.6	5.30
D	$140 \pm 10\%$	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	$650 \pm 10\%$	13.6-24.0	9.5	5.6	1.0	22.9	14.3	8.6	1.54
к	$1350 \pm 10\%$	20.0-35.0	13.5	8.1	1.5	15.5	10.0	6.0	1.10
N	$2245\pm10\%$	26.0-46.0	17.1	10.5	1.9	12.0	7.6	4.7	0.84

RELEASED FOR PUBLICATION

ALL RIGHTS RESERVED

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

			Voltage	Calibrated	d, Code 5		Current C	alibrated, Co	ode 6
Coil	Coil Resistance	Suggested	Max. Operate	and the second second second	Voltage @ 25C	Max. Continuous	Max. Operate		Current 25C (mA)
Code Letter	@ 25C (ohms)	Source Volts†	Volts @ 25C	Max.	Min.	Current @ 125C (mA)	Current @ 25C (mA)	Max.	Min.
B C	$\begin{array}{c} 56 \pm 10\% \\ 85 \pm 10\% \end{array}$	2.6-7.0 3.3-9.5	1.8 2.3	1.1 1.4	0.16 0.20	46.5 38.7	29.1 24.2	18.2 15.1	3.30 2.70
D E	$\begin{array}{c} 140 \pm 10\% \\ 210 \pm 10\% \end{array}$	4.3-12.0 5.3-14.0	2.9 3.6	1.8 2.2	0.27 0.33	30.4 24.8	19.0 15.5	11.9 9.7	2.10 1.75
F G	$360 \pm 10\%$ $510 \pm 10\%$	6.7-19.0 8.2-23.0	4.5 5.6	2.8 3.5	0.41 0.51	18.9 15.8	11.8 9.9	7.2 6.2	1.30 1.10
HK	$\begin{array}{c} 775 \pm 10\% \\ 1350 \pm 10\% \end{array}$	10.0-26.0 13.2-35.0	6.8 9.0	4.2 5.6	0.62 0.82	12.8 9.8	8.0 6.1	5.0 3.8	0.90
N	$2245 \pm \mathbf{10\%}$	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%. $\ddagger Applicable over the operating temperature range in circulating air.$

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

		١	/oltage Calibra	ted, Code 5		(Current Calibrated, (Code 6	
Coil Code	Coil Resistance @ 25C	Suggested Source	Max. Operate		Voltage @ 25C	Max. Contin- uous Current	Max. Operate Current @		e Current 25C (mA)
Letter	(ohms)	Volts†	Wolts @ 25C	Max.	Min.	@ 125C (mA)	25C (mA)	Max.	Min.
Α	44±10%	3.5- 6.2	2.4	1.45	0.26	87.0	54.5	32.7	6.00
В	56 ± 10%	4.0- 7.0	2.7	1.6	0.3	77.0	48.3	28.6	5.30
D	$140 \pm 10\%$	6.4-12.0	4.4	2.6	0.5	50.3	31.4	18.5	3.60
E	$210 \pm 10\%$	8.0-16.0	5.4	3.2	0.6	40.0	25.7	15.4	2.80
L	$650 \pm 10\%$	13.6-24.0	9.5	5.6	1.0	22.9	14.3	8.6	1.54
ĸ	$1350 \pm 10\%$	20.0-35.0	13.5	8.1	1.5	15.5	10.0	6.0	1.10
N	$2245\pm10\%$	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)

	**			1			T		
Α	44 ± 10%	3.9- 7.0	3.4	2.0	0.37	98.2	77.3	45.5	8.4
В	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
к	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

THIS DRAWING IS A CO	ONTROLLED DOCUMENT.	dwn RV	19NOV2019		_		
	Γ	снк RV	19NOV2019			TE Connectivity	
DIMENSIONS:	TOLERANCES UNLESS OTHERWISE SPECIFIED:	APVD MB	19NOV2019	NAME			
	0 PLC ± - 1 PLC ± -	PRODUCT SPEC				3SBC-SERIES	
	$\begin{array}{ccc} 1 & \text{PLC} & \pm - \\ 2 & \text{PLC} & \pm - \\ 3 & \text{PLC} & \pm - \end{array}$					_	
Ť -	4 PLC ± – ANGLES ± –	_		SIZE	CAGE CODE	DRAWING NO	ESTRICTED TO
MATERIAL	FINISH	WEIGHT	_	A3	—	C-3SBC-SERIES	_
_	_	CUSTOMER [DRAWING			SCALE NTS SHEET 2 OF 3	REV

16.8-46.0 *Values listed are factory test and inspection data. User should allow for meter variations. ‡Applicable over the operating temperature range in circulating air. †At nominal resistance plus 10%.

1470-19 (1/15)

REVISIONS			
DESCRIPTION	DATE	DWN	APVD
	_	_	_

D

С

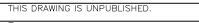
В

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

	Current C	Calibrated, C	ode 6
Max. Continuous	Max. Operate		Current 25C (mA)
Current @ 125C (mA)	Current @ 25C (mA)	Max.	Min.
87.0	54.5	32.7	6.00
77.0	48.3	28.6	5.30
50.3	31.4	18.5	3.60
40.0	25.7	15.4	2.80
22.9	14.3	8.6	1.54
15.5	10.0	6.0	1.10
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)

	Current C	Calibrated, Co	ode 6	
Max.	Max.	Release Current		
Continuous	Operate	Range @ 25C (mA)		
Current @ 125C (mA)	Current @ 25C (mA)	Max.	Min.	
46.5	29.1	18.2	3.30	
38.7	24.2	15.1	2.70	
30.4	19.0	11.9	2.10	
24.8	15.5	9.7	1.75	
18.9	11.8	7.2	1.30	
15.8	9.9	6.2	1.10	
12.8	8.0	5.0	0.90	
9.8	6.1	3.8	0.68	
7.4	4.6	2.9	0.52	



4



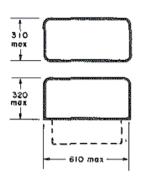
Mounting Forms (3SBC, 3SCC) (Vibration note with each form is acceleration from 55 to 3000 Hz)

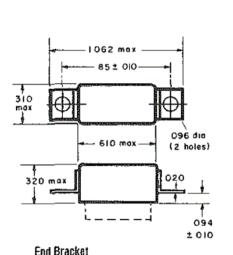
D

С

В

А





RELEASED FOR PUBLICATION

ALL RIGHTS RESERVED.

, . – –

No Mount

ivo mount		CHO DI BORGI
Mounting Code	Vibration	Mounting Code
00	30g	13

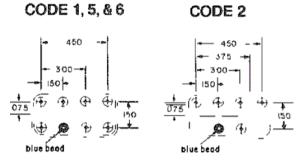
*Assumes relay held securely by potting or other means

Header and Connection Diagrams

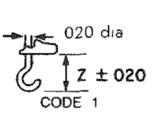
Header Types

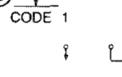
	Z	HEADER			
TYPE	DIMENSION	CODE			
Solder hook	0 13	1			

CODE 1, 5, & 6

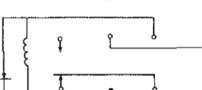


Terminal View





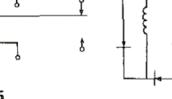




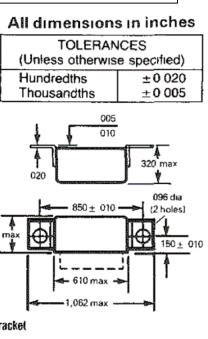
r°

Vibration 30g

+ 1 CODE 5



SINGLE DIODE



Mounting Code	Vibration		
25	30g		



3		2			1				
					REVISIONS				
			P LTR		DESCRIPTION	DATE	DWN	APVD	
All dimensions in			- 5	EE SHEET 1		_	_		
TOLERANCE (Unless otherwise s		Flectric :	al Characte	ristics	Operating Character	istics			
Hundredths	±0 020		Ratings —		Operate Time — 4 ms n				
Thousandths	±0 005		/e — 2 amps a	t 28 volts	Release Time — 6 ms r				
005		(50,000 op	,		Contact Bounce — 1.5 r				
	320 ma×		28 V (100,000	• •	Dielectric Strength (No	te 1) —			
020		200 mH	ive — 0.5 amp	s at 28 volts,	500 volts rms at sea level;	t and above			
850 ± 010	096 dia (2 holes)		/e — 0.5 amps	at 115 volts	350 volts rms at 70,000 fee				
320 max	150 ± 010		25 amps at 115		Insulation Resistance (1,000 megohm min. over to	,			
	1	grounded)		,	range	omporataro			
🖛 610 max -🗫			— 50 µA at 50	mV	Environmental Chara	acteristics			
I,062 max Side Bracket	<u>_</u> ₽_j	Peak AC o			Vibration — 30G, to 300	0 Hz			
	Vibration		Resistance — ns max.; 0.150		Shock — 100 G at 11 ms				
25	30g	test	15 111ax., 0.150	UTITIS AILEI THE	Temperature — -65°C t	o +125°C			
			00,000 operatio	ons at rated	Semiconductor Char	acteristics	\$		
			d; 1,000,000 o		at 25°C				
		low-level l	oads		Diode —				
		.150 Gr	id-space		Max. Negative Transient — Breakdown Voltage — 100		7		
		Hybrid I	•		Max. Leakage Current — 1				-
		Sinale I	Diode, Dual	Diode	-				
· · · · ·			BC (2PDT)						
₽ ₽ Ľ <u> </u>	``		. ,						
:		135 mW							
blue bead		Product							
CODE 2			rofile only						E
β ζ γ	, , ,		nches high						
{ *		■ 50 mil	lliwatt forms	available					
8 + 1 +	• · · · ·	Qualif	ied to MIL-R	-39016/37					
L	J CODE 6	🔳 Qualif	ied to MIL-R	-39016/38					
	AL DIODE	🔳 RF de:	signs availal	ble					
THIS DRAWING	IS A CONTROLLED DO	CUMENT. RV	19N	OV2019					
DIMENSION	S: TOLERANCES	СНК	19N	OV2019	TE Conr	nectivity			
INCHES	OTHERWISE SF	PECIFIED: APVD	3	OV2019 NAME	3SBC-SERIES	х)			
	0 PLC ± - 1 PLC ± -	PRODU	JCT SPEC		_				A
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	APPLI	CATION SPEC	SIZE CAGE	CODE DRAWING NO		RESTRIC	TED TO	
MATERIAL	ANGLES	<u>±</u> – – – – – WEIGH	— IT	Δ. ζ	– C =3SBC-SERIES	5	_	_	
-	-	CUS	STOMER DRAWI			HEET 3 OF 3	REV	/	
	1				IN13	J ^{ur}		<u> </u>	l



Mouser Electronics

Authorized Distributor

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

TE Connectivity:

3SBC1788A2