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REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
A		INITIAL RELEASE	27SEP2019	RV	BM

**General Specifications****Temperature Rating —**

-70°C TO +125°C

**Altitude —** 300,000 Feet**Shock\* —**

Z, Y, &amp; X Enclosures —

200 g for 6 mS

W &amp; M Enclosures (Stud Mtg.) —

100 g for 6 mS

T Enclosure (Socket Mounted in Track) —

50 g for 11 mS

**Vibration, Sinusoidal\* —**

Z, Y, &amp; X Enclosures —

0.12 DA 10 to 70 Hz, 30 g 70-3000Hz

W &amp; M Enclosures (Stud Mtg.) —

0.12 DA 10 to 57 Hz, 20 g 57-3000Hz

T Enclosure (Socket Mounted in Track) —

0.06 DA 10 to 57 Hz, 10 g 57 to 500Hz,

20 g 500 to 3000 Hz

**Vibration, Random\* —**

Z, Y, &amp; X Enclosures —

0.4 g<sup>2</sup>/Hz 50-2000Hz

T, W &amp; M Enclosures —

0.2 g<sup>2</sup>/Hz 50-2000Hz**Dielectric Strength —**

At Sea Level —

All circuits to ground and circuit to circuit — 1000 V rms

Coil to ground — 1000 V rms

At 80,000 Feet — 250 V rms

**Insulation Resistance —**

Initial (500 VDC) — 100 MΩ Min.

After Life or Environmental Tests —

50 MΩ Min.

**Operate Time at Nominal Voltage —** 4 ms or less**Release Time at Nominal Voltage —** 4 ms or less

\* Max. contact opening under vibration or shock 10 microseconds

**Coil Data**

Coil Code	Nominal Voltages	Freq. Hz	DC Res. (B)	Over Temperature Range		
				Pickup or Below Volts	Dropout or Above Volts	Must Hold Voltage (C)
1	6	DC	20 Ω	4.5	0.3	2.5
2	12	DC	95 Ω	9.0	0.75	4.5
3	28	DC	500 Ω	18.0	1.5	7.0
4 (A)	28	DC	500 Ω	18.0	1.5	7.0
5	48	DC	1600 Ω	36.0	2.5	14.0

A. CODE 4 COILS HAVE BACK EMF SUPPRESSION TO 42 VOLTS MAX.

B. DC COIL RESISTANCE ± 10% AT 25°C

C. RELAY WILL STAY IN PICKED-UP STATE DOWN TO MUST HOLD VOLTAGES SHOWN.

D. MAX. OVERVOLTAGE: 6 &amp; 12 VDC COILS 120% OF NOMINAL; ALL OTHERS 110% OF NOMINAL.

**Contact Rating — Amperes****Ratings Are Continuous Duty**

Type of Load	Life (Min.) Cycles x 10 <sup>3</sup>	28 VDC	115VAC 400Hz	115/200VAC 400Hz, 30
Resistive	100	5	5	5
Inductive	20	3	5	5
Motor	100	2	3	3
Lamp	100	1	1	1

\*60 Hz loads rated for 10,000 operations

Low Level Switching Capability: With contacts operating a load of 10 to 50 microamperes at 10 to 50 millivolts, the contact resistance miss detection level shall be 100 ohms max. Cycling rate is 1 to 12 per second, for 100,000 operations.

**Overload Current —** 20 AMPS DC, 30 AMPS 400Hz**Rupture Current —** 25 AMPS DC, 40 AMPS 400Hz**Contact Make Bounce —** 1.0 MILLISECOND AT NOMINAL VOLTAGE**Max. Contact Drop at 5 Amps —** INITIAL 0.100 VOLTS**End of Life —** 0.125 VOLTS

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS:  
INCHES

TOLERANCES UNLESS  
OTHERWISE SPECIFIED:

0 PLC	± -
1 PLC	± -
2 PLC	± -
3 PLC	± -
4 PLC ANGLES	± -

FINISH

-

DWN  
RV  
CHK  
RV  
APVD  
BM

27SEP2019

27SEP2019

27SEP2019

—

PRODUCT SPEC

—

APPLICATION SPEC

—

WEIGHT

—

CUSTOMER DRAWING

NAME

TE Connectivity

FCB-205 SERIES

—

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SIZE

A3

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CAGE CODE

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DRAWING NO

FCB-205-SERIES

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RESTRICTED TO

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## REVISIONS

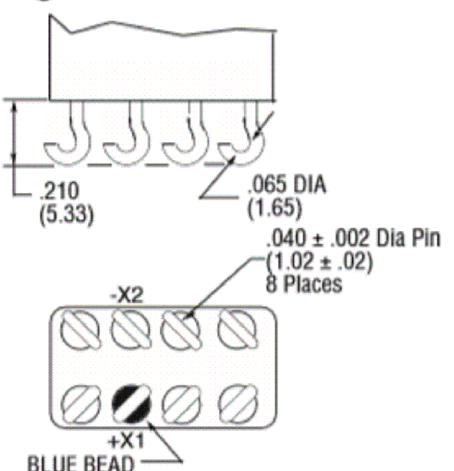
P	LTR	DESCRIPTION	DATE	DWN	APVD
-	-	SEE SHEET 1	-	-	-

Below are shown the standard terminal types and the enclosures available. Specify the assembly as indicated under How To Order. Dimensions are shown in inches  $\pm .010$  and (Millimeters  $\pm .25$ ).

## Terminals

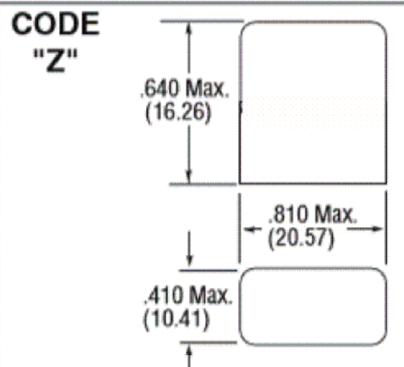
## CODE Solder Hook Terminals

"C" Hook Terminals Tin/Lead Plated



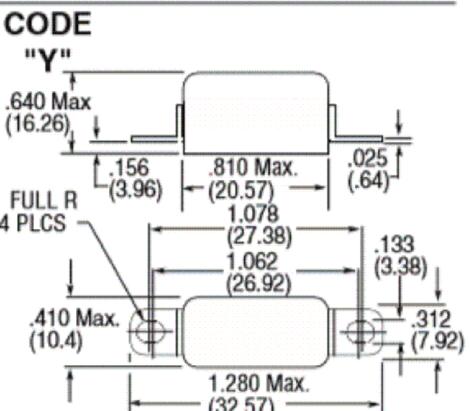
## CODE

"Z"



## CODE

"Y"



## Enclosures

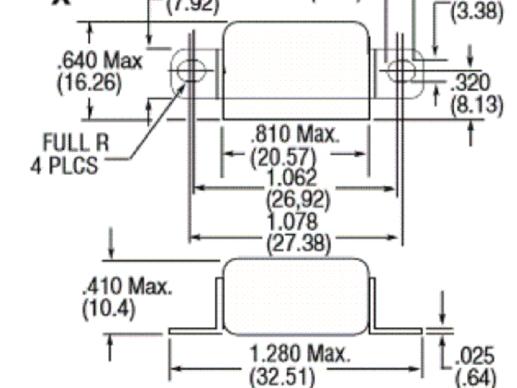
All Enclosures have Cupro-Nickel Cans bright acid tin/lead plated after assembly to terminal headers.

Dimensions: Inches  $\pm .010$  (mm  $\pm .25$ )

Enclosure "T" is for use with track mounted sockets and requires socket pin terminals, but no gasket. The gasket is included in the socket assembly.

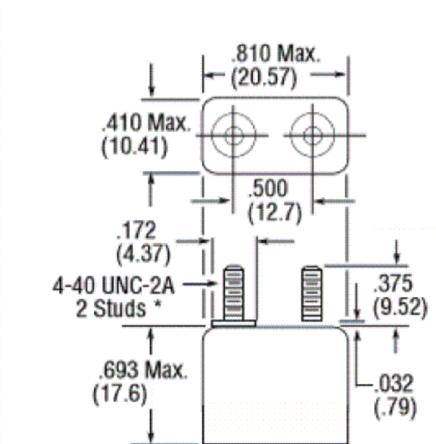
## CODE

"X"



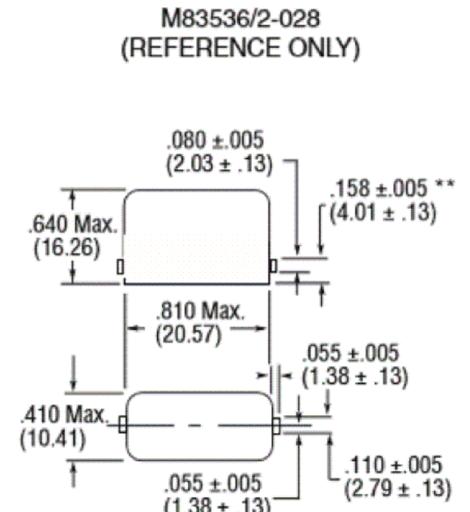
## CODE

"W"

\*Metric threads available, To specify use **M** in place of **W**

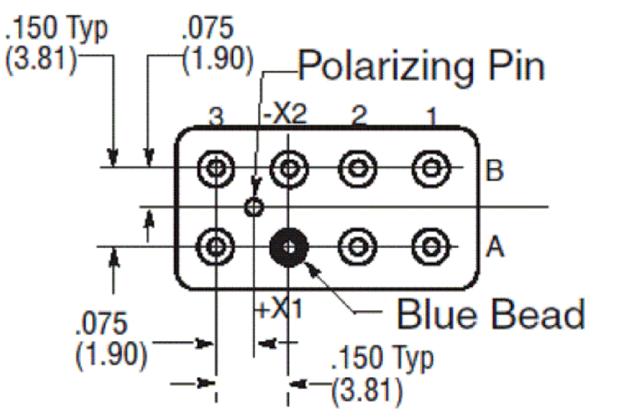
## CODE

"T"



NOTE: FOR USE WITH TRACK MOUNT PER MIL-R-6106/23

\*\* MEASURED FROM SURFACE OF HEADER



## TERMINAL VIEW

**NOTE:** Polarity must be observed with DC coil supply. Relay is polarized with a permanent magnet and will not operate or be damaged by reverse polarity.

Diodes used in transient suppression and in AC rectifier circuits have peak inverse voltage rating of 600 VDC minimum. Zener diodes have a minimum rating of 1 watt.

Terminal designations are for reference only and do not appear on the header.

ALL DIMENSIONS ARE IN INCHES(MM)

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DIMENSIONS:  
INCHES

0 PLC	$\pm -$
1 PLC	$\pm -$
2 PLC	$\pm -$
3 PLC	$\pm -$
4 PLC ANGLES	$\pm -$

MATERIAL

FINISH

DWN  
RV  
CHK  
RV  
APVD  
BM27SEP2019  
27SEP2019  
27SEP2019

PRODUCT SPEC

—

APPLICATION SPEC

—

WEIGHT

—

 TE Connectivity

FCB-205 SERIES

—

—

SIZE CAGE CODE DRAWING NO RESTRICTED TO

A3 — C-FCB-205-SERIES —

SCALE NTS SHEET 2 OF 2 REV A

CUSTOMER DRAWING

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