

E210 RELAY (2PDT/10A)

Built to MIL-PRF-83536

FEATURES

- Balanced force design provides the benefit of consistently high contact pressure, reduced bounce, and less arching leading to extended contact life
- A variety of coil options are available which allow DC control
- Wide choice of mounting and terminal styles
- Built to MIL-PRF-83536 for severe condition applications

APPLICATIONS

- Aerospace
- Military/Defense
- Marine
- Space

GENERAL CHARACTERISTICS

- No. of Poles: 2 Form C (2PDT)
- Dimensions: 1.025" x 0.525" x 1.010"
(26.0 x 13.3 x 25.7) mm
- Weight
Mounting Code 4: 0.12 lbs Max (54.5 grams)
All Others: 0.10 lbs Max (46.0 grams)

SWITCHING CHARACTERISTICS

- Operate Time @ +25°C: EA210: 20 ms. Max
All Others: 10 ms. Max
- Release Time @ +25°C: Mounting Code 4: 20 ms. Max
EA210: 50 ms. Max
All Others: 10 ms. Max
- Bounce Time: 1 ms. Max
- Mechanical Life: Up to 400,000 Cycles

ENVIRONMENTAL CHARACTERISTICS

- Temperature Range: -70°C to +125°C
- Vibration (Sinusoidal): 30g 10-3,000 Hz
- Shock (Any Axis): 200g, 6 ms
- Seal: Hermetic (1x10⁻⁸ atm cm³/s)



ELECTRICAL CHARACTERISTICS

- Contact Voltage Drop (at Rated Resistive Load)
Initial: 150 mV Max.
After Guaranteed Life: 175 mV Max.
- Dielectric Strength @ Sea Level

Mounting Code 4:	Coil to Case	All Other Points
Initial @ 60 Hz:	1,050 V _{rms}	1,500 V _{rms}
After Life Test @ 60 Hz:	1,050 V _{rms}	1,250 V _{rms}

All Others		
Initial @ 60 Hz:	1,000 V _{rms}	1,250 V _{rms}
After Life Test @ 60 Hz:	1,000 V _{rms}	1,000 V _{rms}
- Insulation Resistance
Initial: 100 MΩ Min, @ 500 Vdc
After Life Tests (Mounting Code 4): 100 MΩ Min, @ 500 Vdc
After Life Tests (All Others): 50 MΩ Min, @ 500 Vdc
Max. Leakage Current (Mounting Code 4): 100 μA RMS

E210 Relay (2PDT/10A)

Built to MIL-PRF-83536

CONTACT RATING (AMPS)

Type of Load (High Level)	Cycles x10 ³	28 Vdc	115 Vac, 400 Hz 1 Phase	115 Vac, 50/60 Hz 1 Phase	115/200 Vac, 400 Hz 3 Phase	115/200 Vac, 50/60 Hz 3 Phase
Resistive	100	10	10	2.5	10	2.5
Inductive	20	8	8	N/A	8	N/A
Inductive	10	N/A	N/A	2.5	N/A	2.5
Motor	100	4	4	2	4	2
Lamp	100	2	2	1	N/A	N/A

PART NUMBERING

BASIC SERIES

E210	2PDT
ES210	2PDT w/Internal Voltage Suppresion
EA210	2PDT w/ AC Coil

COIL CODE

MOUNTING CODE

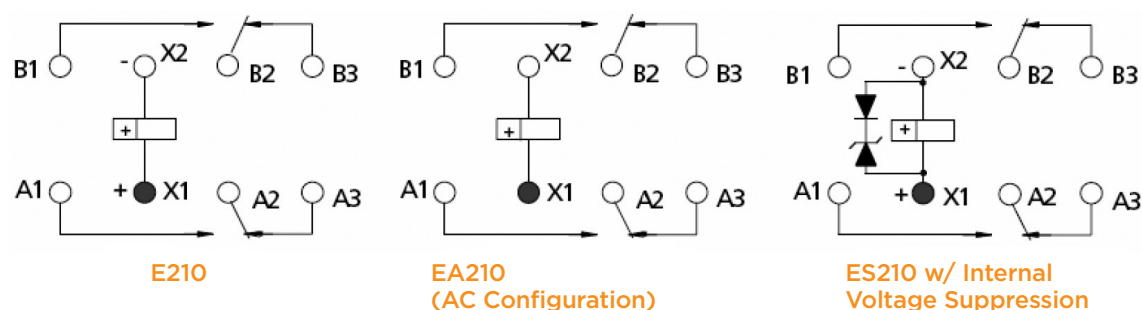
TERMINAL CODE

OPTIONS

D	Catalog Standard
A	Delete Arc Barriers
xxxx	Special Code, Assigned by TE

Part Number				
E210				
ES210				
EA210	E	2	M	D

CIRCUIT DIAGRAM



E210 Relay (2PDT/10A)

Built to MIL-PRF-83536

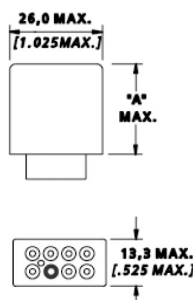
COIL CODE

Coil Code	Vdc								
	A	B	D	E	G	J	K	L	N
Nominal Coil Voltage	6	12	26.5	28	48	110	28 400 Hz	115 400 Hz	115 50-400 Hz
Maximum Pick-Up Voltage @ +25°C	3.2	6.5	13.5	14	24	55	16.2	73	73
Maximum Pick-Up Voltage @ +125°C	4.5	9	18	18.7	36	70	22.4	90	90
Maximum Hold Voltage @ +125°C	2.3	4.5	7	7	14	30	9	30	40
Minimum Drop-Out Voltage @ -70°C	0.25	0.5	1.2	1.5	2	5	1	5	5
Coil Resistance (Ω ± 10% @ +25°C)	20	80	320	320	955	5000	—	—	—
Maximum Coil Transient Suppression (ES210 Only) Vdc	-42	-42	-42	-42	-100	-227	N/A	N/A	N/A

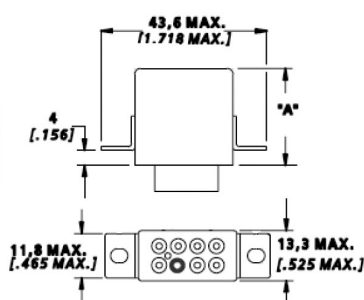
MOUNTING CODE

"A" = 1.010 for DC Coils

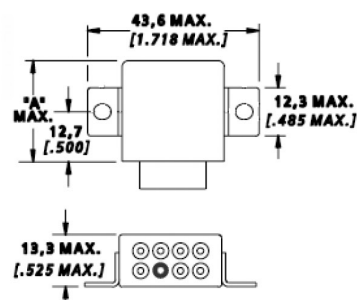
"A" = 1.125 for AC Coils



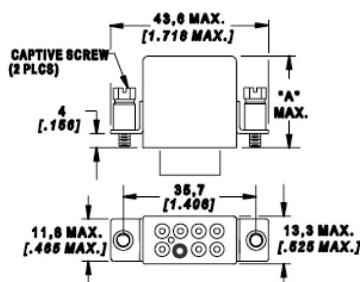
Mount 1



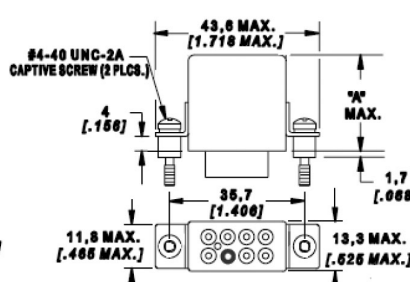
Mount 2



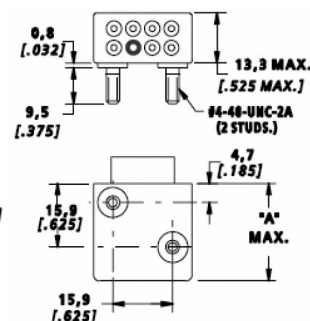
Mount 3



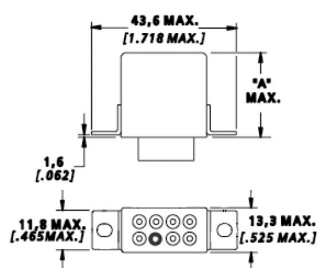
Mount 8: M3
Mount C: #4-40 UNC



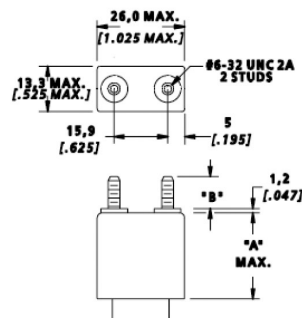
Mount G



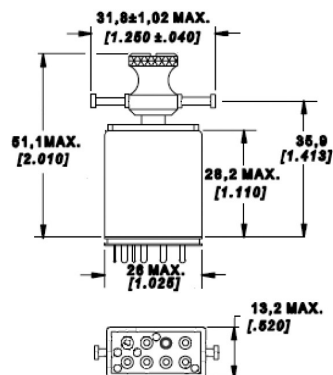
Mount D



Mount N



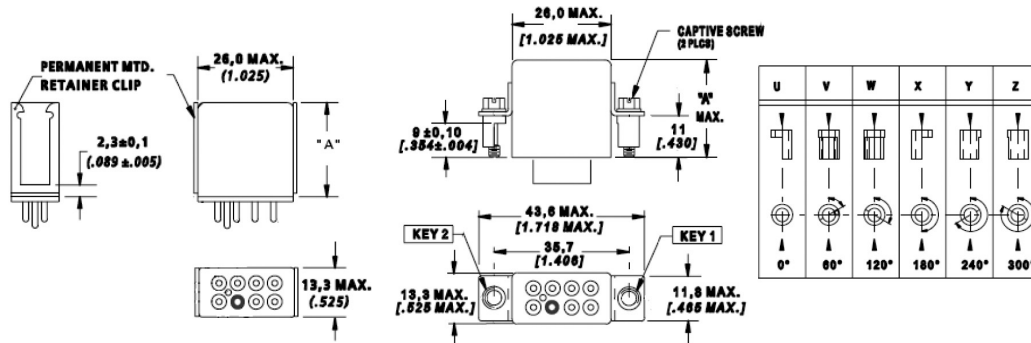
Mount M: A = 9.5 mm (.375")
Mount R: A = 6.35 mm (.250")



Mount 4: Requires Terminal M

E210 Relay (2PDT/10A)

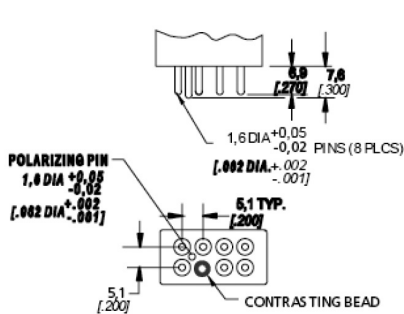
Built to MIL-PRF-83536



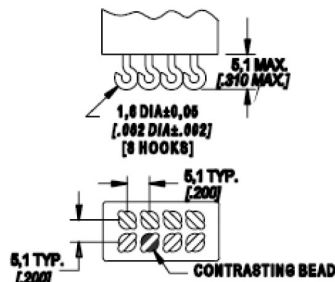
Mount 6: Requires
Terminal M, F or G

Mount A: M3
Mount B: #4-40 UNC

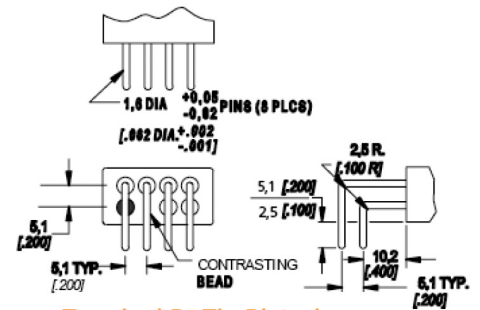
TERMINAL CODE



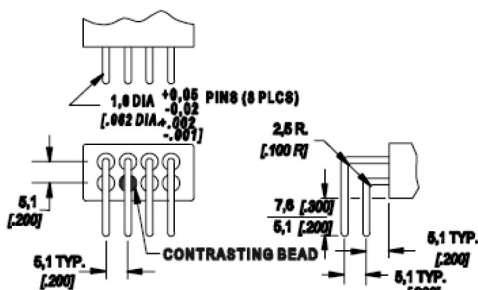
Terminal A: Tin Plated (DC)
Terminal B: Solder Dipped (DC)



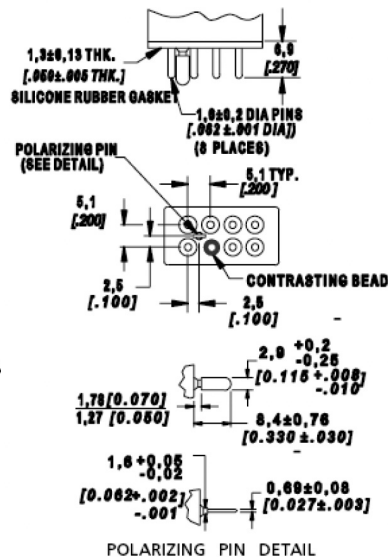
Terminal H: Tin Plated
Terminal J: Solder Dipped



Terminal D: Tin Plated
Terminal E: Solder Dipped

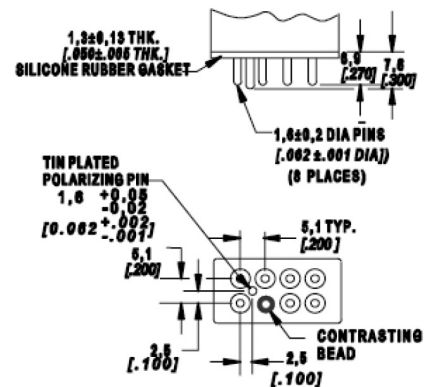


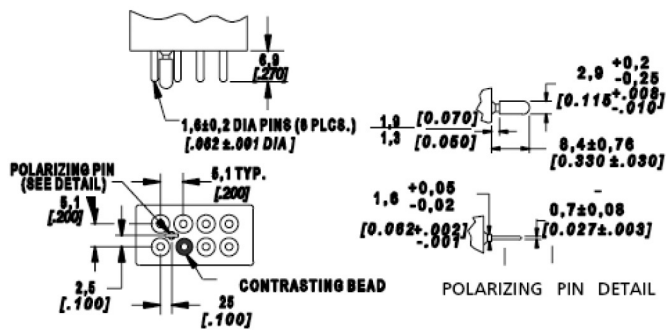
Terminal Q: Tin Plated
Terminal R: Solder Dipped



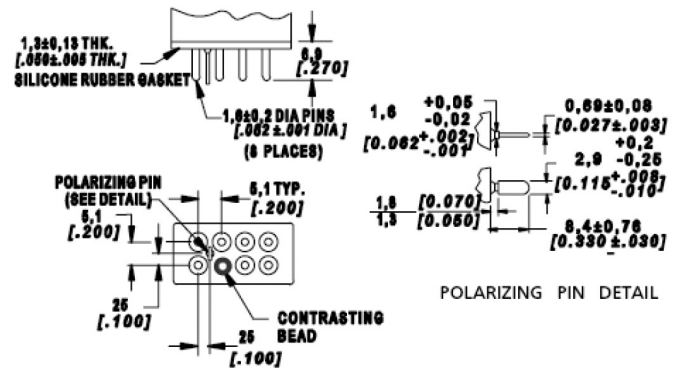
Terminal G: Gold Plated (115 Vac)

Terminal M: Gold Plated w/ Polarizing Pin (DC)
Terminal C: Gold Plated w/o Polarizing Pin (DC)





Terminal K: Tin Plated (115 Vac Only)



Terminal F: Gold Plated (28 Vac Only)

Connect With Us

We make it easy to connect with our experts and are ready to provide all the support you need. Visit te.com/support to chat with a Product Information Specialist.

te.com/dri-relays

TE, TE Connectivity, TE connectivity (logo), and EVERY CONNECTION COUNTS are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. Other product names, logos, and company names mentioned herein may be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2024 TE Connectivity. All Rights Reserved.

adm-dri-E210-ds-en-0824 10/24

Mouser Electronics

Authorized Distributor

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

[TE Connectivity:](#)

[M83536/10-020M](#)