



A COMPANY OF STPI GROUP

# **E110 & ES110**

## **Military Specified**

### **Meets MIL-PRF-83536**

#### **General Characteristics**

Number of Poles:

Dimensions:

Weight:

1 Form C (1PDT)

0.810" x 0.410" x 0.640"

(20.6mm x 10.4mm x 16.3mm)

0.037 lb. (17 grams)

#### **Switching Characteristics**

Operate Time @ 25°C:

Release Time @ 25°C:

Bounce Time:

Mechanical Life:

6 ms Max.

6 ms Max.

1 ms Max.

400,000 Cycles

#### **Environmental Characteristics**

Temperature Range:

Vibration (Sinusoidal):

Shock (any axis):

-Mounting Code 03:

Seal:

-70°C to +125°C

30g 70-3,000 Hz

200g, 6 ms

100g, 6 ms

Hermetic (1x10<sup>-8</sup> atm cm<sup>3</sup>/s)

#### **Electrical Characteristics**

Contact Voltage Drop (at rated resistive load)

-Initial:

-After Guaranteed Life:

Dielectric Strength

Coil to Case @ Sea Level

-Initial @ 60 Hz:

-After Life Test @ 60 Hz:

All Other Points @ Sea Level

-Initial @ 60 Hz:

-After Life Test @ 60 Hz:

Insulation Resistance

-Initial:

-After Life Tests:

Back EMF (Transient Voltage):

150 mV Max.

175 mV Max.

1,000 Vrms

750 Vrms

1,250 Vrms

1,000 Vrms

100 MΩ Min, @ 500 Vdc

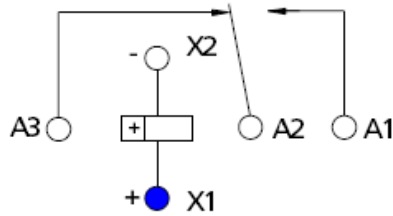
50 MΩ Min, @ 500 Vdc

42 Vdc Max. (ES110 Only)

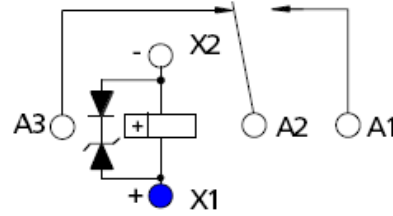
#### **Contact Rating (Amps)**

Type of Load (High Level)	Cycles x 10 <sup>3</sup>	28 Vdc	115 Vac 400 Hz 1 Phase
Resistive	50	10	10
Inductive	10	6	N/A
Inductive	20	N/A	8
Motor	50	4	4
Lamp	50	2	2

### Circuit Diagram



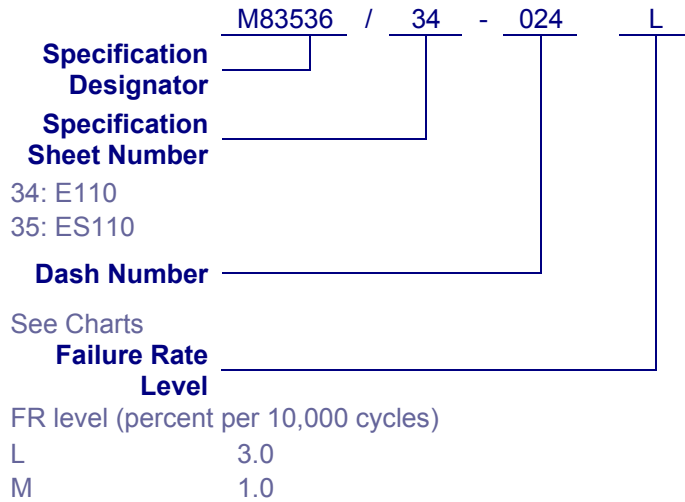
E 110



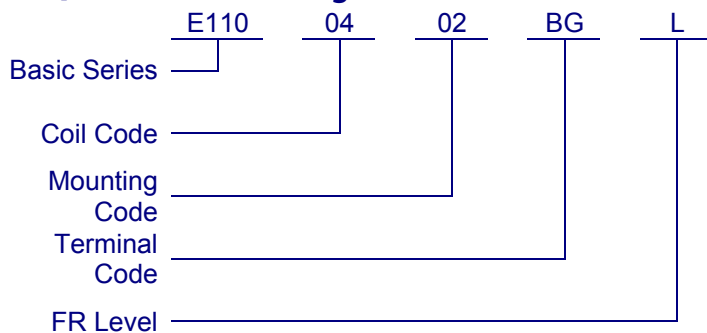
ES 110

OPTIONAL INTERNAL  
VOLTAGE SUPPRESSOR

### Military Part Numbering



### QPL Part Numbering



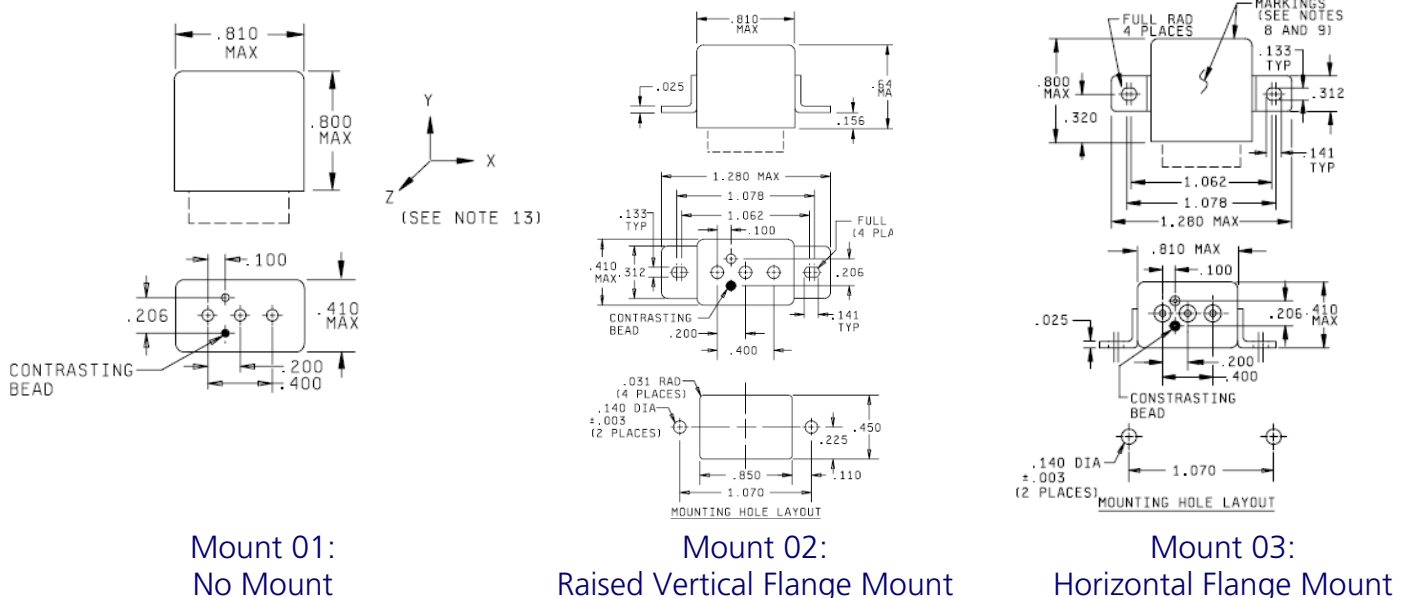
### Dash Numbers – Specification Sheet Number 34: E110

Dash Number	Coil Code	Mount	Terminals	Coil Voltage	Max Pickup Voltage at 25°C	Max Pickup Voltage at 125°C	Max Hold Voltage at 125°C	Min Dropout Voltage at -70°C	Coil Resistance (Ω, +/- 10% at 25°C)
019	04	01	CT	28	13.5	18	7	1.5	500
020	04	01	AT	28	13.5	18	7	1.5	500
021	04	01	BG	28	13.5	18	7	1.5	500
022	04	02	CT	28	13.5	18	7	1.5	500
023	04	02	AT	28	13.5	18	7	1.5	500
024	04	02	BG	28	13.5	18	7	1.5	500
025	04	03	CT	28	13.5	18	7	1.5	500
026	04	03	AT	28	13.5	18	7	1.5	500
027	04	03	DT	28	13.5	18	7	1.5	500

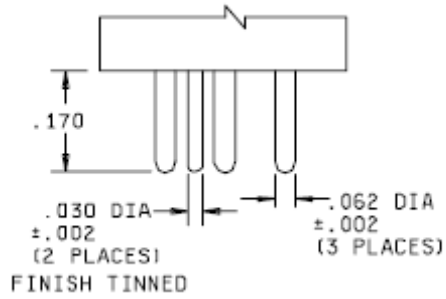
### Dash Numbers – Specification Sheet Number 35: ES110

Dash Number	Coil Code	Mount	Terminals	Coil Voltage	Max Pickup Voltage at 25°C	Max Pickup Voltage at 125°C	Max Hold Voltage at 125°C	Min Dropout Voltage at -70°C	Coil Resistance (Ω, +/- 10% at 25°C)
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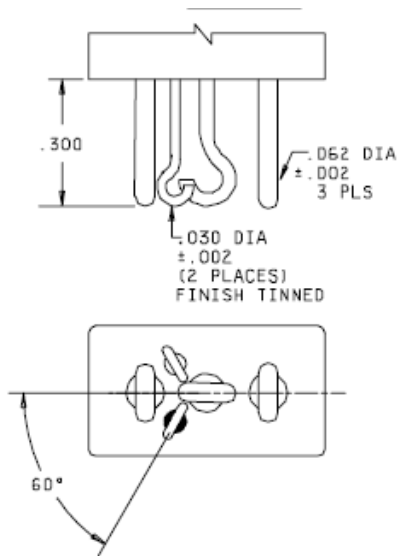
### Mounting Styles



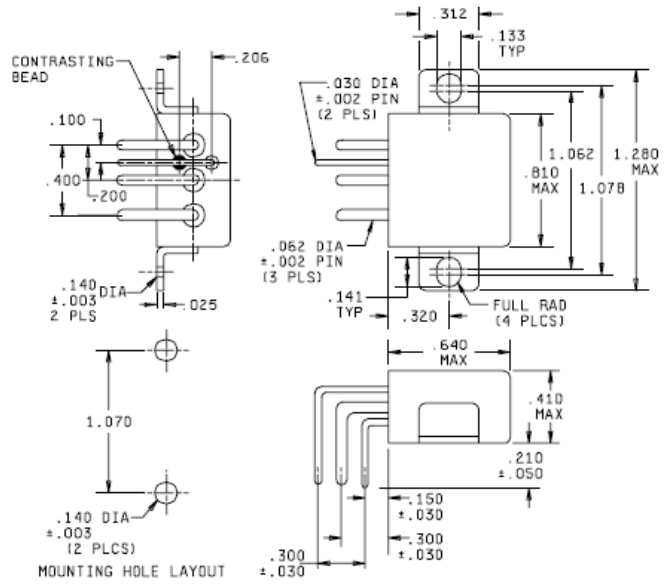
## Terminal Styles



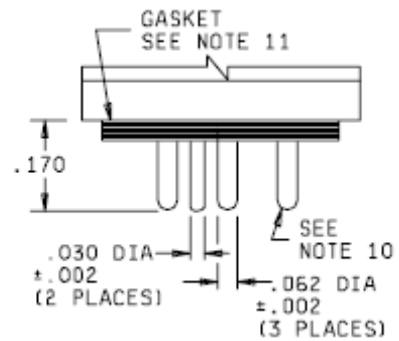
Terminal CT:  
Tin Plated Solder Pin



Terminal AT:  
Tin Plated Solder Hook



Terminal DT:  
Tin Plated 90° Solder Pin



Terminal BG:  
Gold Plated Plug in