DURAKOOL
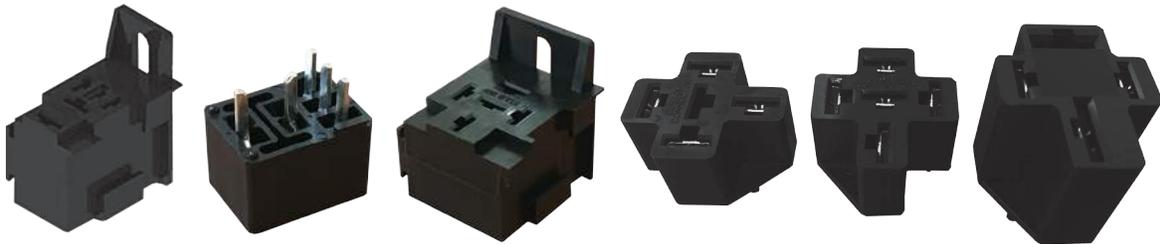
DZ Sockets
for
Automotive Relays

About American Electronics Components Incorporated

AEC founded as Durakool in 1935 is a leader in the design and manufacture of specialized highly engineered electrical and electronic components, primarily for automotive and industrial applications. Our product line includes position sensors, G-force sensors, acceleration switches, **Durakool** relays, push button switches, inclination sensors & switches and **HermaSeal** glass to metal seals. Our creative engineering team has extensive experience in harsh environmental packaging concepts. We use high-quality products and are positioned to support your most challenging applications.

The automotive, transportation, robot arm and industrial markets rely on AEC for sophisticated low-cost sensors and controls that enhance the safety and performance of their products. Through our disciplined approach, we have earned an excellent reputation for our technical innovation, agility, rapid response and high reliability. The AEC team has a "CAN DO" attitude and is ready to tackle your most challenging applications.
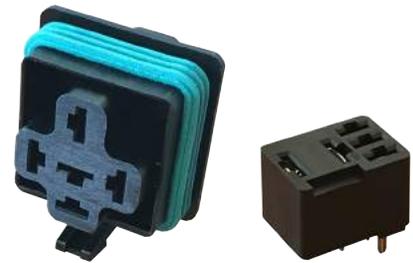
Please contact our Engineering Team at AEC, or your local Distributor, for further information and non standard items within our extensive product range.

Information regarding Durakool Automotive Relay Sockets and Socket Accessories (Clips, Modules & Terminal Strips) can also be found on our website: www.aecsensors.com. To discuss your application or for advice, please call us on the appropriate number below.

Controlling electricity for over 80 years!

American Electronic Components and Durakool

▲ Global production facilities
▲ Extensive product portfolio
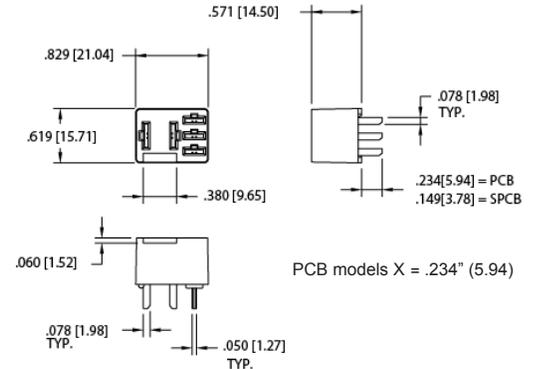▲ Reputation for high reliability
▲ ISO9001:2008 & ISO14001:2004 Registered

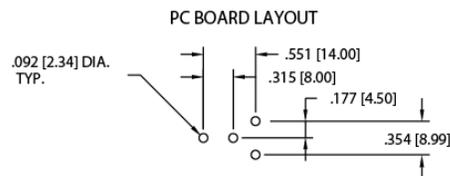## Index of Contents

DZ82AB-4-PCB - 4 Pin PCB socket for micro-ISO relays

- Brass, bright tin (Sn) plated contacts
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- 4 Pin
- PCB Mount
- RoHS Compliant

PC BOARD LAYOUT

.092 [2.34] DIA. TYP.
.551 [14.00]
.315 [8.00]
.177 [4.50]
.354 [8.99]

.571 [14.50]
.829 [21.04]
.619 [15.71]
.380 [9.65]
.078 [1.98] TYP.
.234[5.94] = PCB
.149[3.78] = SPCB
.060 [1.52]
.078 [1.98] TYP.
.050 [1.27] TYP.

PCB models X = .234" (5.94)

Dimensions inches [mm]

DZ82AB-5-PCB - 5 Pin PCB socket for micro-ISO relays

- Brass, bright tin (Sn) plated contacts
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- 5 Pin
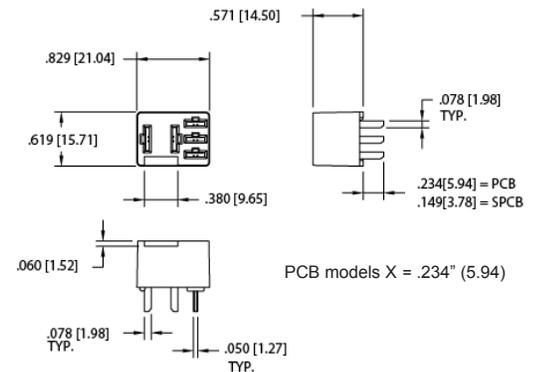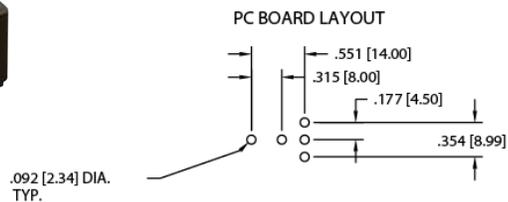- PCB Mount
- RoHS Compliant

PC BOARD LAYOUT

.551 [14.00]
.315 [8.00]
.177 [4.50]
.354 [8.99]
.092 [2.34] DIA. TYP.

.571 [14.50]
.829 [21.04]
.619 [15.71]
.380 [9.65]
.078 [1.98] TYP.
.234[5.94] = PCB
.149[3.78] = SPCB
.060 [1.52]
.078 [1.98] TYP.
.050 [1.27] TYP.

PCB models X = .234" (5.94)

Dimensions inches [mm]

DZ82AB-4-SPCB - 4 Short pin PCB socket for micro-ISO relays

- Brass, bright tin (Sn) plated contacts
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- 4 Short pins
- PCB Mount
- RoHS Compliant

PC BOARD LAYOUT

.092 [2.34] DIA. TYP.
.551 [14.00]
.315 [8.00]
.177 [4.50]
.354 [8.99]

.571 [14.50]
.829 [21.04]
.619 [15.71]
.380 [9.65]
.078 [1.98] TYP.
.234[5.94] = PCB
.149[3.78] = SPCB
.060 [1.52]
.078 [1.98] TYP.
.050 [1.27] TYP.

SPCB models X = .149" (3.78)

Dimensions inches [mm]

American Electronic Components Inc., Tel: Toll free [USA] 888-847-6552 +1-574-295-6330 sales@aecsensors.com www.aecsensors.com

4

DZ82AB-5-SPCB - 5 Short pin PCB socket for micro-ISO relays

- Brass, bright tin (Sn) plated contacts
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
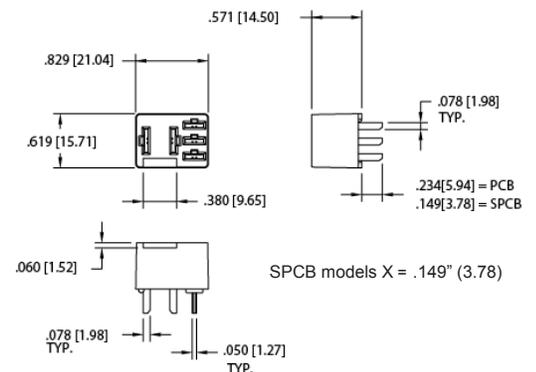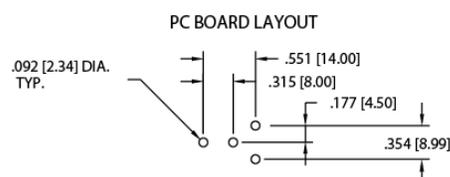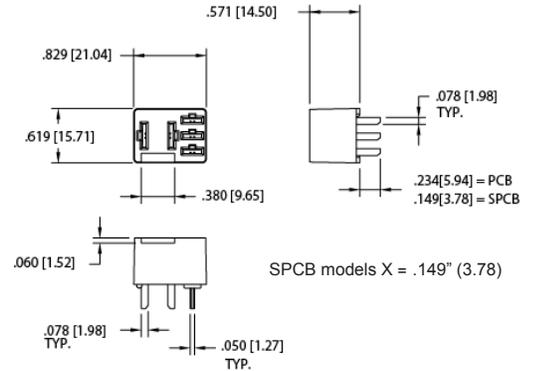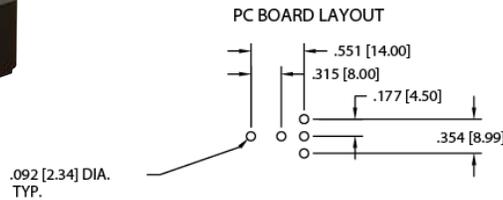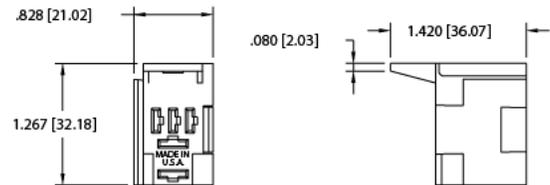- 5 Short pins
- PCB Mount
- RoHS Compliant

PC BOARD LAYOUT

.551 [14.00]
.315 [8.00]
.177 [4.50]
.354 [8.99]
.092 [2.34] DIA. TYP.

.571 [14.50]
.829 [21.04]
.078 [1.98] TYP.
.619 [15.71]
.234 [5.94] = PCB
.149 [3.78] = SPCB
.380 [9.65]
.060 [1.52]
.078 [1.98] TYP.
.050 [1.27] TYP.

SPCB models X = .149" (3.78)

Dimensions inches [mm]

DZ82AB-5-WH1 - Socket with mounting bracket for micro-ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- Typical suitable terminals:

  - ♦ AMP 42100 ¼" blade 14-18 AWG
  - ♦ AMP 42281 ¼" blade 14-18 AWG
  - ♦ AMP 42904 ¼" blade 12-16 AWG
  - ♦ AMP 60249 ¼" blade 12-16 AWG
  - ♦ AMP 60253 ¼" blade 12-14 AWG
  - ♦ AMP 281197 ³/₁₆" blade 13-17 AWG
  - ♦ AMP 282180 ³/₁₆" blade 15-20 AWG

- 5 Pin housing
- Crimp not supplied
- RoHS Compliant

.828 [21.02]
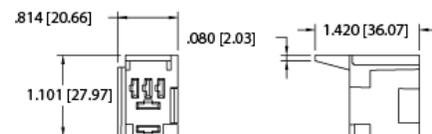.080 [2.03]
1.420 [36.07]
1.267 [32.18]
MADE IN U.S.A.

Dimensions inches [mm]

DZ82AB-5-WH2 - Socket with mounting bracket for micro-ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- Typical suitable terminals:

  - ♦ AMP 42100 ¼" blade 14-18 AWG
  - ♦ AMP 42281 ¼" blade 14-18 AWG
  - ♦ AMP 42904 ¼" blade 12-16 AWG
  - ♦ AMP 60249 ¼" blade 12-16 AWG
  - ♦ AMP 60253 ¼" blade 12-14 AWG
  - ♦ AMP 281197 ³/₁₆" blade 13-17 AWG
  - ♦ AMP 282180 ³/₁₆" blade 15-20 AWG

- 5 Pin housing
- Crimp not supplied
- RoHS Compliant

.814 [20.66]
.080 [2.03]
1.420 [36.07]
1.101 [27.97]

Dimensions inches [mm]

American Electronic Components Inc., Tel: Toll free [USA] 888-847-6552 +1-574-295-6330 sales@aecsensors.com www.aecsensors.com

5

DZ85AB-4-WH - 4 Pin cable housing socket without mounting bracket for mini-ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- Typical suitable terminals:
  - ♦ AMP   42100   ¼" blade 14-18 AWG
  - ♦ AMP   42281   ¼" blade 14-18 AWG
  - ♦ AMP   42904   ¼" blade 12-16 AWG
  - ♦ AMP   60249   ¼" blade 12-16 AWG
  - ♦ AMP   60253   ¼" blade 12-14 AWG
- RoHS Compliant

1.265 [32.13]
1.147 [29.12]
.761 [19.33]
.206 [5.23]
.292 [7.43]
.697 [17.72]
.319 [8.12]
.632 [16.05]
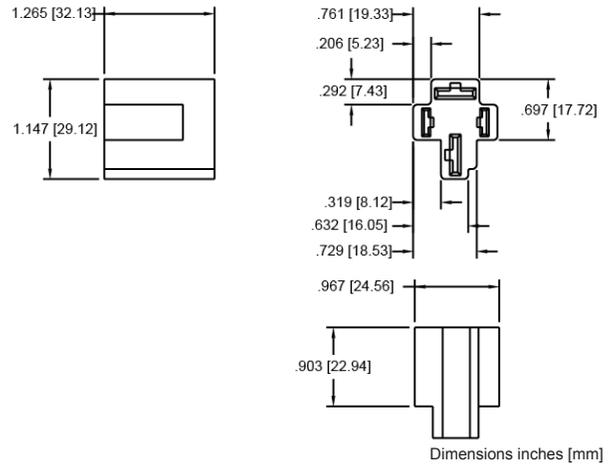.729 [18.53]
.967 [24.56]
.903 [22.94]

Dimensions inches [mm]

DZ85AB-5-WH - 5 Pin cable housing socket without mounting bracket for mini-ISO relays
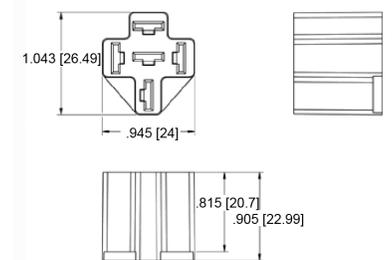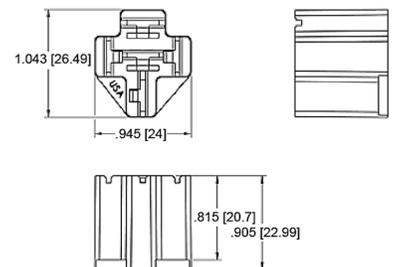
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- Typical suitable terminals:
  - ♦ AMP   42100   ¼" blade 14-18 AWG
  - ♦ AMP   42281   ¼" blade 14-18 AWG
  - ♦ AMP   42904   ¼" blade 12-16 AWG
  - ♦ AMP   60249   ¼" blade 12-16 AWG
  - ♦ AMP   60253   ¼" blade 12-14 AWG
- RoHS Compliant

1.043 [26.49]
.945 [24]
.815 [20.7]
.905 [22.99]

Dimensions inches [mm]

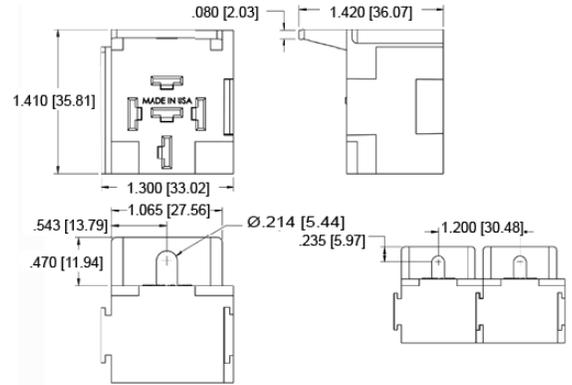## DZ85AB-5-WH1 - 5 Pin cable housing sockets for relays or flashers

- Heat stabilised thermoplastic, 140°C
- For industry standard terminals - not included
- Typical suitable terminals:
  - ♦ AMP   42100   ¼" blade 14-18 AWG
  - ♦ AMP   42281   ¼" blade 14-18 AWG
  - ♦ AMP   42904   ¼" blade 12-16 AWG
  - ♦ AMP   60249   ¼" blade 12-16 AWG
  - ♦ AMP   60253   ¼" blade 12-14 AWG
- RoHS Compliant

1.043 [26.49]
.945 [24]
.815 [20.7]
.905 [22.99]

Dimensions inches [mm]

American Electronic Components Inc.,   Tel: Toll free [USA] 888-847-6552   +1-574-295-6330   sales@aecsensors.com   www.aecsensors.com

6

DURAKOOL

DZ85AB-5-WH2 - 5 Pin cable housing socket with mounting bracket for mini-ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- Brass, bright tin (Sn) plated contacts
- For industry standard terminals - not included
- Typical suitable terminals:
  - ♦ AMP   42100   ¼" blade 14-18 AWG
  - ♦ AMP   42281   ¼" blade 14-18 AWG
  - ♦ AMP   42904   ¼" blade 12-16 AWG
  - ♦ AMP   60249   ¼" blade 12-16 AWG
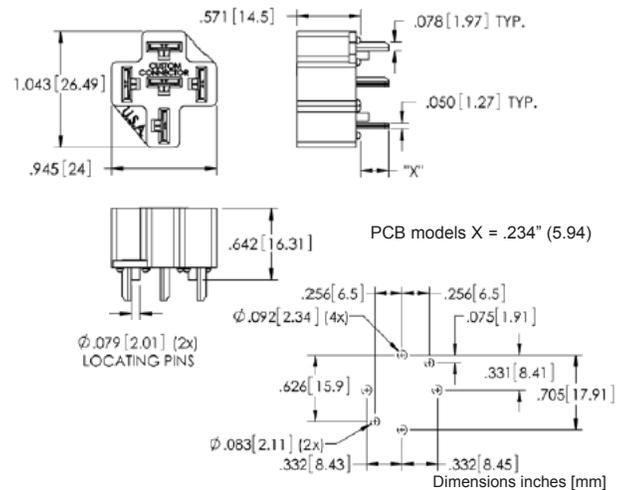 - ♦ AMP   60253   ¼" blade 12-14 AWG
- RoHS Compliant

Dimensions inches [mm]

DZ85AB-4-PCB - 4 Pin PCB socket for mini ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- Brass, bright tin (Sn) plated contacts
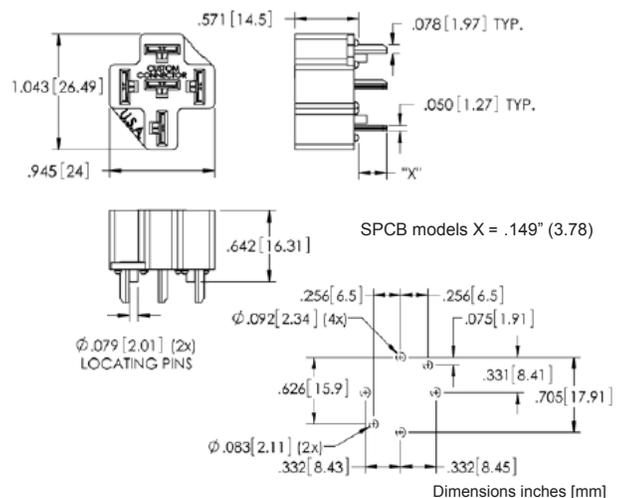- 4 Pin
- RoHS Compliant

PCB models X = .234" (5.94)

Dimensions inches [mm]

DZ85AB-4-SPCB - 4 Short pin PCB socket for mini-ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
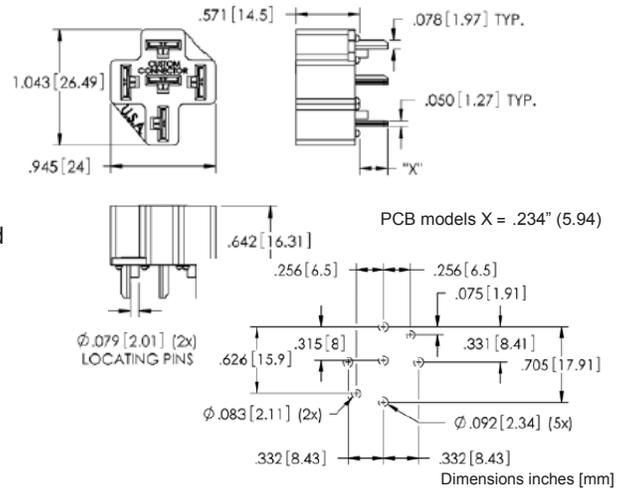- Brass, bright tin (Sn) plated contacts
- 4 Short pins
- RoHS Compliant

SPCB models X = .149" (3.78)

Dimensions inches [mm]

American Electronic Components Inc.,   Tel: Toll free [USA] 888-847-6552   +1-574-295-6330   sales@aecsensors.com   www.aecsensors.com

7

DZ85AB-5-PCB - 5 Pin PCB socket for mini-ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- 5 Pin
- RoHS Compliant

PCB models X = .234" (5.94)

Dimensions inches [mm]

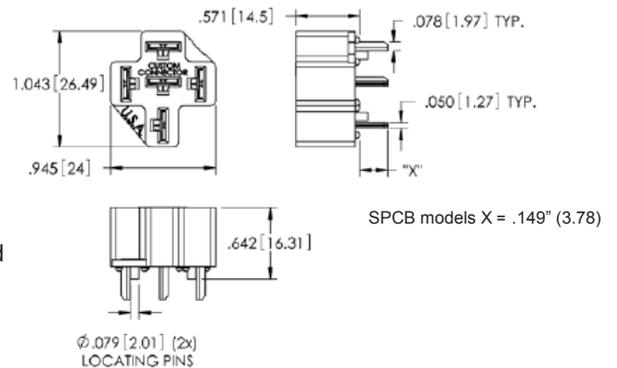## DZ85AB-5-SPCB - 5 Short pin socket for mini-ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
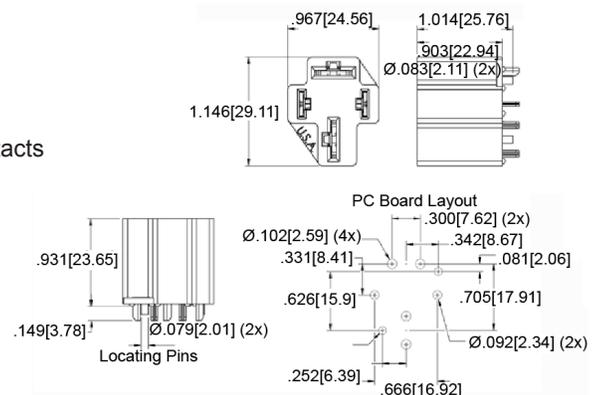- 5 Short pins
- RoHS Compliant

SPCB models X = .149" (3.78)

Dimensions inches [mm]

DZ85CD-4-SPCB - 4 Terminal PCB - 6 Short pin socket for mini-ISO relays

- SPCB Model, Brass, Bright Tin (Sn) Plated Contacts
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
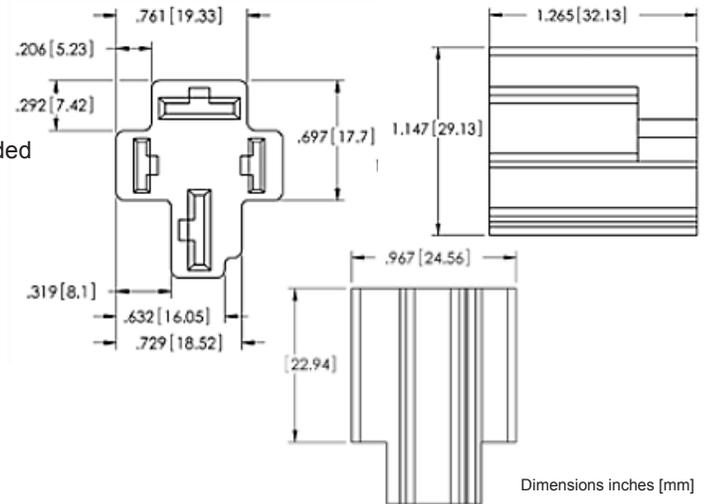- 6 Short Pins
- RoHS Compliant

PC Board Layout

Dimensions inches [mm]

American Electronic Components Inc., Tel: Toll free [USA] 888-847-6552 +1-574-295-6330 sales@aecsensors.com www.aecsensors.com

8

DZ85CD-4-WH - 4 Terminal cable housing socket for maxi-ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- Typical suitable crimp terminals:
  - ♦ AMP   42100   ¼" blade 14-18 AWG
  - ♦ AMP   42281   ¼" blade 14-18 AWG
  - ♦ AMP   42904   ¼" blade 12-16 AWG
  - ♦ AMP   60249   ¼" blade 12-16 AWG
  - ♦ AMP   60253   ¼" blade 12-14 AWG
  - ♦ AMP   280756   ⅜" blade 10-12 AWG
- RoHS Compliant

Dimensions inches [mm]

DZ85CD-5-WH - 5 Terminal cable housing socket for maxi-ISO relays
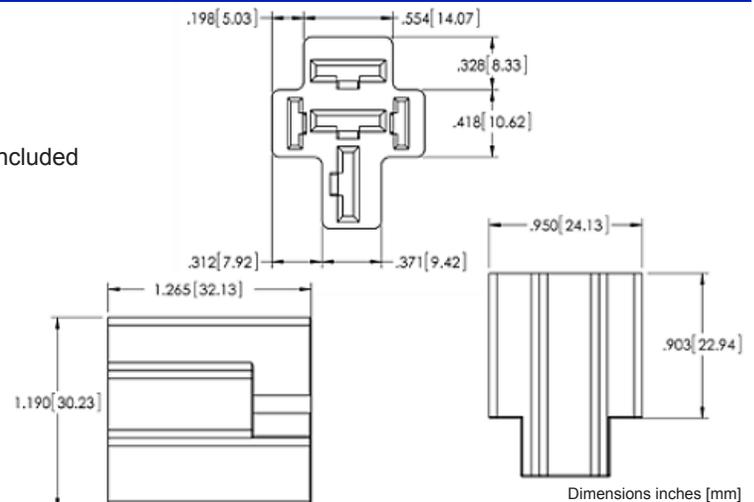
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- Typical suitable crimp terminals:
  - ♦ AMP   42100   ¼" blade 14-18 AWG
  - ♦ AMP   42281   ¼" blade 14-18 AWG
  - ♦ AMP   42904   ¼" blade 12-16 AWG
  - ♦ AMP   60249   ¼" blade 12-16 AWG
  - ♦ AMP   60253   ¼" blade 12-14 AWG
  - ♦ AMP   280756   ⅜" blade 10-12 AWG
- RoHS Compliant

Dimensions inches [mm]

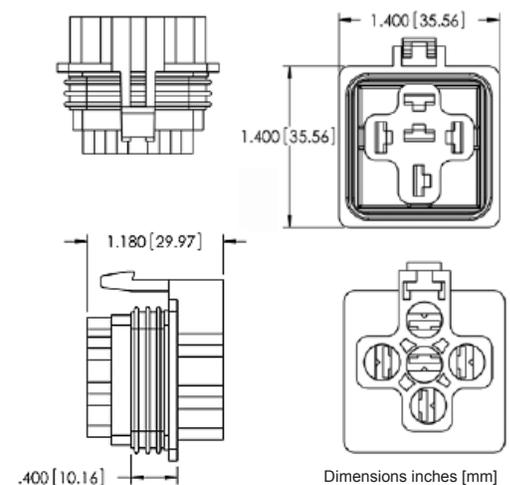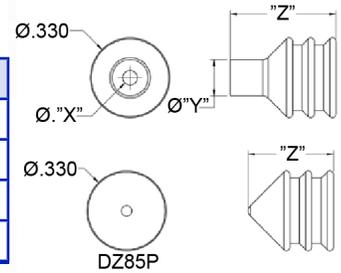## DZ85AB-5-WP Weatherproof socket for mini-ISO relays

- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- Typical suitable crimp terminals:
  - ♦ AMP   42100   ¼" blade 14-18 AWG
  - ♦ AMP   60253   ¼" blade 12-14 AWG
- RoHS Compliant
- IP67
- Testing passed:
  - ♦ Dust Exposure:
    SAE J1455 Sect. 4.7, IEC 60529 Sect. 13.4 & 13.6
  - ♦ Salt Spray: ASTM B117-07
  - ♦ Water Immersion IEC 60529 Sect. 14.2.7
  - ♦ Fluids Compatability SAE J1455 Sect. 4.7, Engine Oil,
    Brake Fluid, Washer Solvent, Gasoline, Diesel Fuel

Dimensions inches [mm]

American Electronic Components Inc.,   Tel: Toll free [USA] 888-847-6552   +1-574-295-6330   sales@aecsensors.com   www.aecsensors.com

9

High temperature silicone gasket wire seals for weatherproof mini-ISO Socket DZAB-5-WP

Part No.	X	Y	Z	Colour
DZ85S-O	0.060	0.150	0.429	Orange
DZ85S-G	0.090	0.190	0.396	Grey
DZ85S-Y	0.130	0.230	0.376	Yellow
DZ85P-G	N/A	N/A	0.353	Grey

Dimensions inches

American Electronic Components Inc., Tel: Toll free [USA] 888-847-6552 +1-574-295-6330 sales@aecsensors.com www.aecsensors.com

10

DURAKOOL