DURAKOOL®

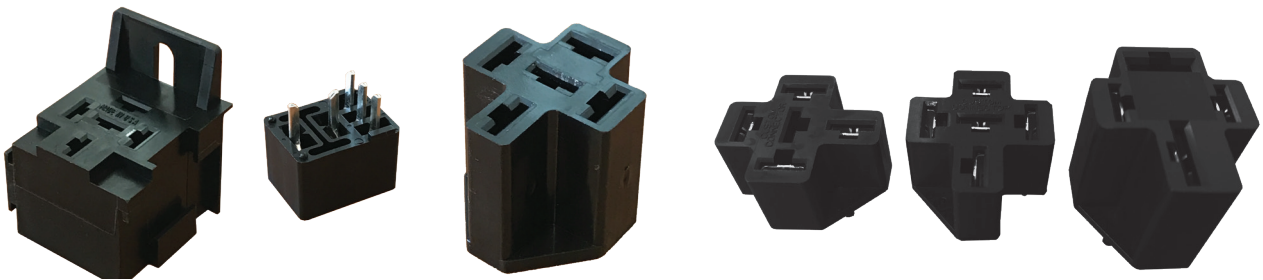## DZ Sockets for Automotive Relays

See website for contact details:

Durakool

Durakool, a Solid State Group Brand, has a long history, some 90 years, in the manufacturing of specialised, highly engineered, electrical and electronic components, primarily for automotive and industrial applications.

This catalogue gives detailed information of our specialised DZ automotive sockets, designed to fit Durakool automotive relays.

Durakool's unique range of automotive relays and HVDC contactors are specially designed for applications up to 1500VDC, together with high current switching of DC loads. Specialist contactors can switch more than 3000A and our automotive Mini and Maxi ISO style HVDC relays fit industry standard automotive relay sockets and terminals.
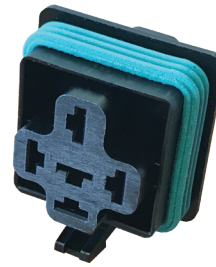
Through our disciplined approach, we have earned an excellent reputation for our technical innovation, agility, rapid response and high reliability. Our Team has a "CAN DO" attitude and is ready to tackle your most challenging applications.

Our creative engineering team has extensive experience in harsh environmental packaging concepts. We use high quality products and make our own glass to metal hermetic seals in house.

Please contact our Engineering Team or your local distributor for further information and non standard items from within our extensive product range.

Controlling electricity for over 90 years!

▲ Global production facilities

▲ Extensive product portfolio

▲ Reputation for high reliability
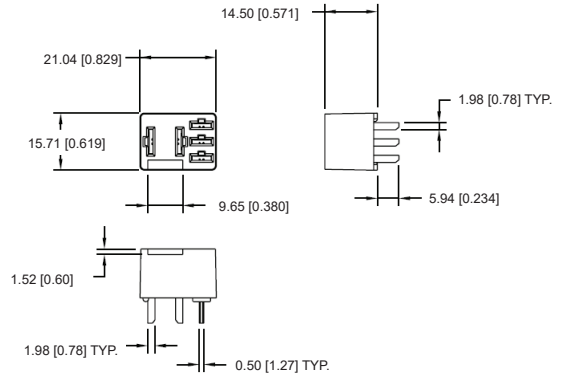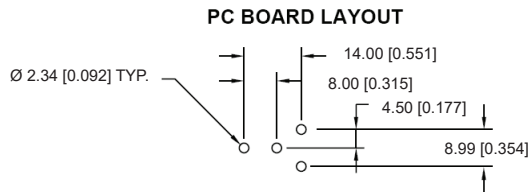
▲ ISO9001:2008 & ISO14001:2004 Registered

Index of Contents

DZ Automotive Relays Catalogue 112323JHM

Specifications are subject to change without notice. E&OE.

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

Ø 2.34 [0.092] TYP.

14.00 [0.551]
8.00 [0.315]
4.50 [0.177]
8.99 [0.354]

14.50 [0.571]
21.04 [0.829]
15.71 [0.619]
9.65 [0.380]
1.98 [0.78] TYP.
5.94 [0.234]
1.52 [0.60]
1.98 [0.78] TYP.
0.50 [1.27] TYP.

Dimensions mm [inches]

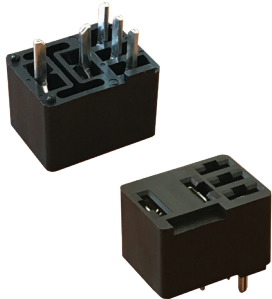## DZ82AB-5-PCB - 5 Pin PCB socket for micro-ISO relays

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

PC BOARD LAYOUT

14.00 [0.551]
8.00 [0.315]
4.50 [0.177]
8.99 [0.354]
Ø 2.34 [0.092] TYP.

14.50 [0.571]
21.04 [0.829]
15.71 [0.619]
9.65 [0.380]
1.98 [0.78] TYP.
5.94 [0.234]
1.52 [0.60]
1.98 [0.78] TYP.
0.50 [1.27] TYP.

Dimensions mm [inches]

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

Ø 2.34 [0.092] TYP.

14.00 [0.551]
8.00 [0.315]
4.50 [0.177]
8.99 [0.354]

14.50 [0.571]
21.04 [0.829]
15.71 [0.619]
9.65 [0.380]
1.98 [0.78] TYP
3.78 [0.149]
1.52 [0.60]
1.98 [0.78] TYP
0.50 [1.27] TYP

Dimensions mm [inches]

DZ Automotive Relays Catalogue 112323JHM

Specifications are subject to change without notice. E&OE.

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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
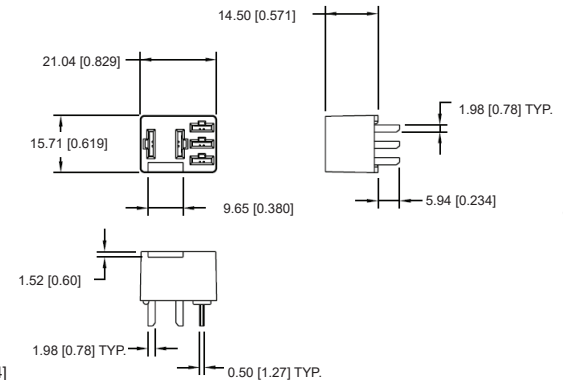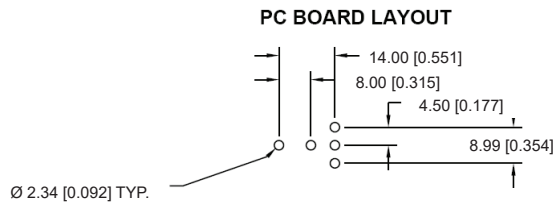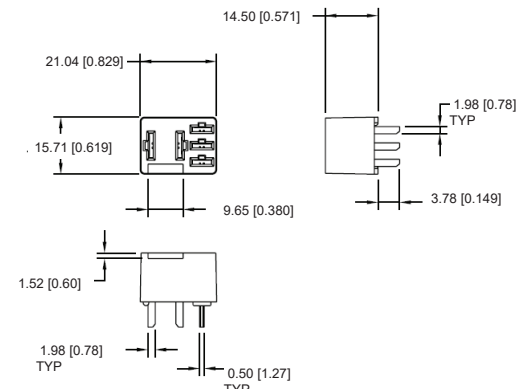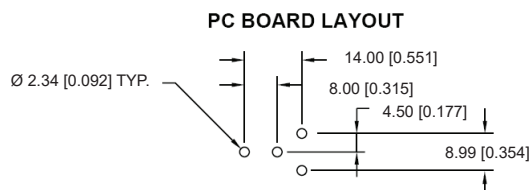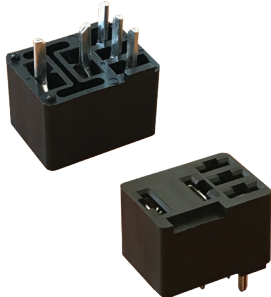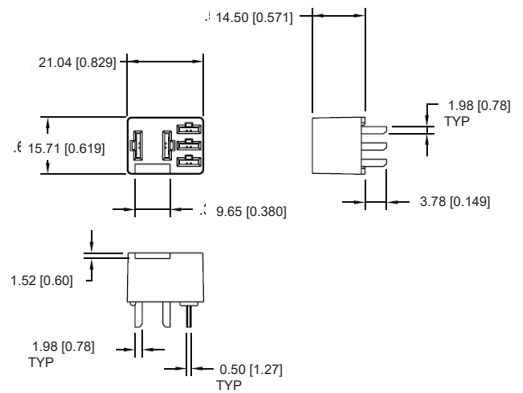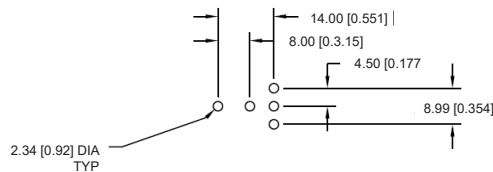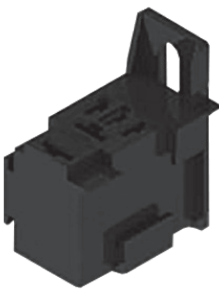- 5 Short pins
- PCB Mount
- RoHS Compliant

PC BOARD LAYOUT

14.50 [0.571]

21.04 [0.829]

1.98 [0.78] TYP

15.71 [0.619]

9.65 [0.380]

3.78 [0.149]

1.52 [0.60]

14.00 [0.551]

8.00 [0.3.15]

4.50 [0.177

1.98 [0.78] TYP

0.50 [1.27] TYP

8.99 [0.354]

2.34 [0.92] DIA TYP

Dimensions mm [inches]

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

21.02 [0.828]

2.03 [0.80]

36.07 [1.420]

32.18 [1.267]

MADE IN U.S.A.
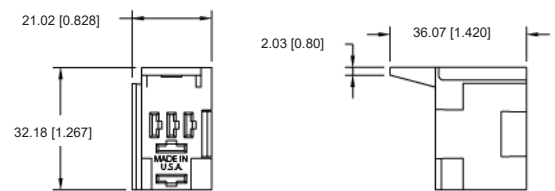
Dimensions mm [inches]

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
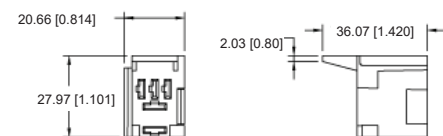- RoHS Compliant

20.66 [0.814]

2.03 [0.80]

36.07 [1.420]

27.97 [1.101]

Dimensions mm [inches]

DZ Automotive Relays Catalogue 112323JHM

Specifications are subject to change without notice. E&OE.

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

NOT FOR NEW DESIGNS

- 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

32.13 [1.265]
29.12 [1.147]
19.33 [0.761]
5.23 [0.206]
7.43 [0.292]
17.72 [0.697]
8.12 [0.310]
16.05 [0.632]
18.53 [0.729]
24.56 [0.967]
22.94 [0.903]

Dimensions mm [inches]

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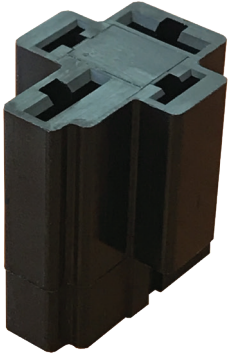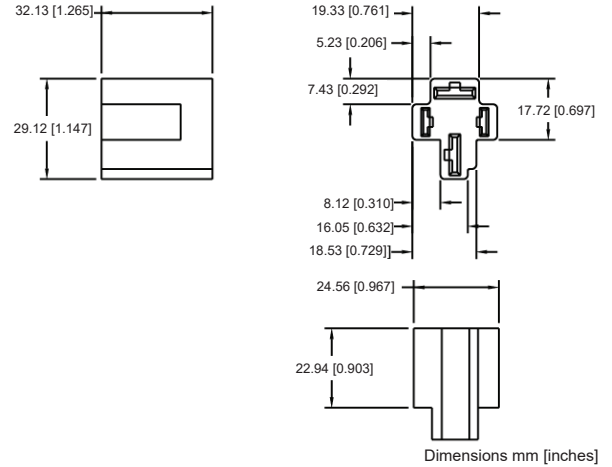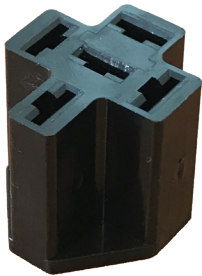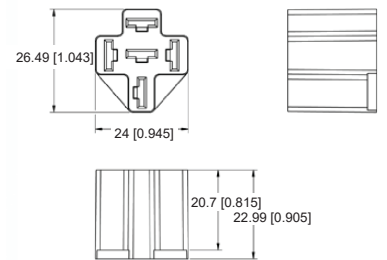
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- Typical suitable terminals:
  - ◆ AMP   42100   ¼" blade 14-18 AWG
  - ◆ AMP   42281   ¼" blade 14-18 AWG
  - ◆ AMP   42904   ¼" blade 12-16 AWG
  - ◆ AMP   60249   ¼" blade 12-16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

26.49 [1.043]
24 [0.945]
20.7 [0.815]
22.99 [0.905]

Dimensions mm [inches]

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

26.49 [1.043]
24 [0.945]
20.7 [0.815]
22.99 [0.905]

Dimensions mm [inches]

DZ Automotive Relays Catalogue 112323JHM

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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 mm [inches]

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

PC BOARD LAYOUT

Dimensions mm [inches]

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

PC BOARD LAYOUT

Dimensions mm [inches]

See website for contact details: www.durakool.com

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

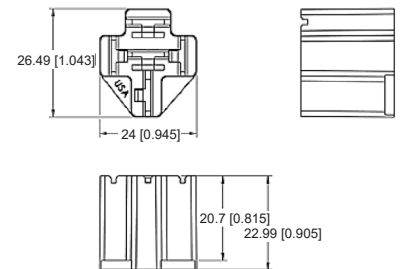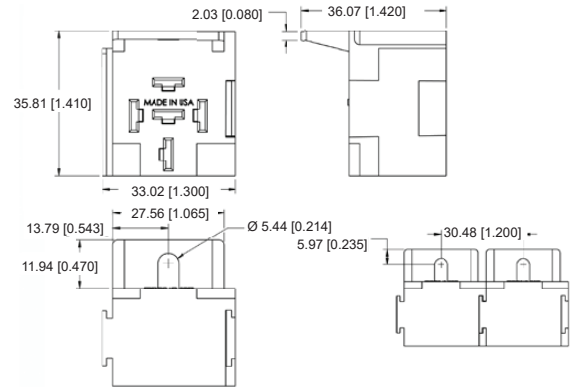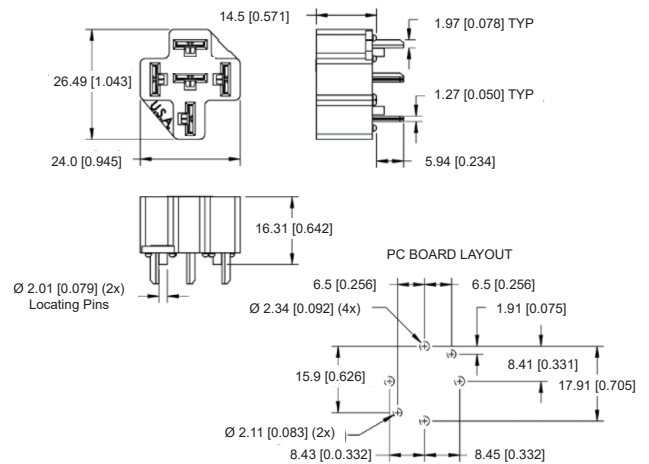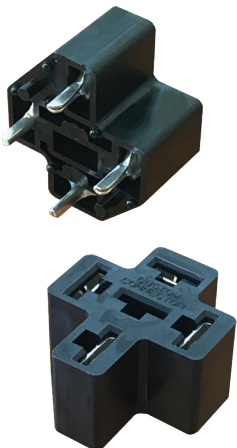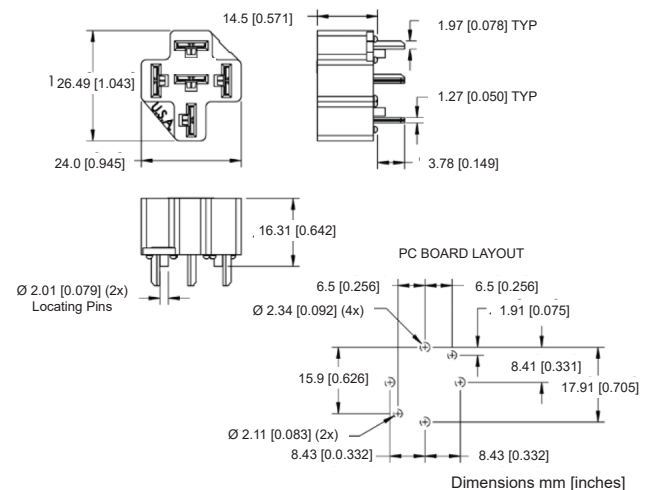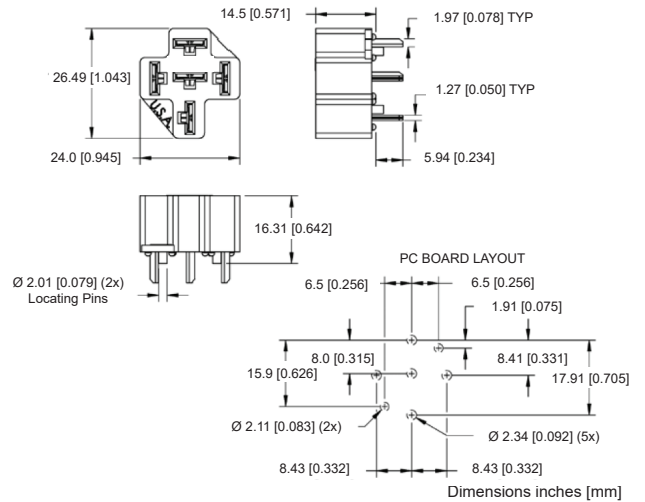- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals
- 5 Pins
- RoHS Compliant

14.5 [0.571] 1.97 [0.078] TYP
26.49 [1.043] 1.27 [0.050] TYP
24.0 [0.945] 5.94 [0.234]
16.31 [0.642]
Ø 2.01 [0.079] (2x) Locating Pins

PC BOARD LAYOUT
6.5 [0.256] 6.5 [0.256]
1.91 [0.075]
8.0 [0.315] 8.41 [0.331]
15.9 [0.626] 17.91 [0.705]
Ø 2.11 [0.083] (2x)
Ø 2.34 [0.092] (5x)
8.43 [0.332] 8.43 [0.332]
Dimensions inches [mm]

DZ85AB-5-SPCB - 5 Short pin socket for mini-ISO relays
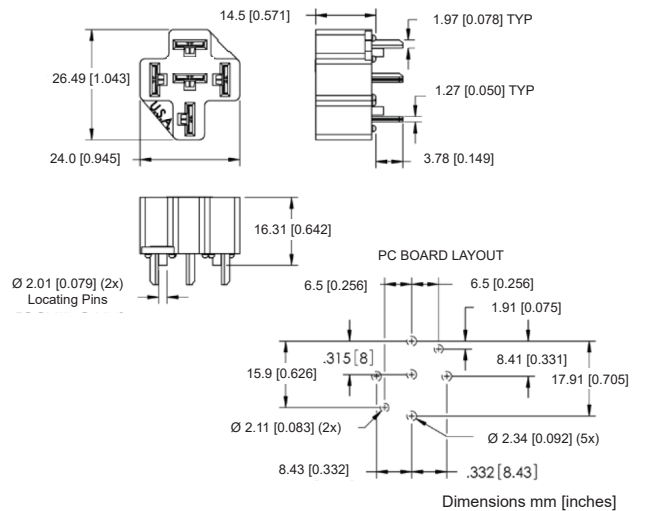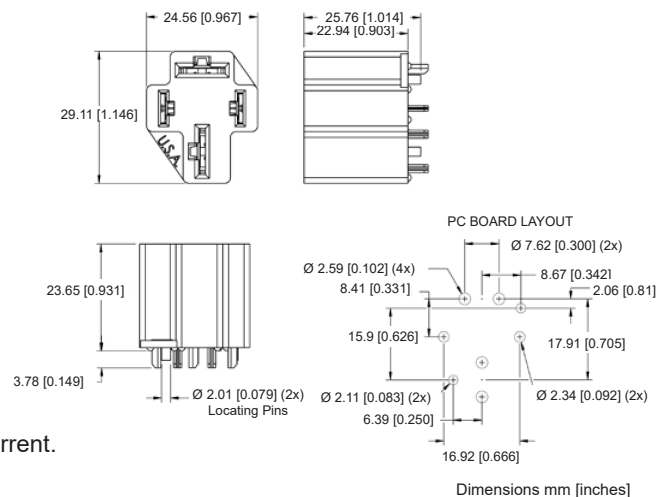
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals
- 5 Short pins
- RoHS Compliant

14.5 [0.571] 1.97 [0.078] TYP
26.49 [1.043] 1.27 [0.050] TYP
24.0 [0.945] 3.78 [0.149]
16.31 [0.642]
Ø 2.01 [0.079] (2x) Locating Pins

PC BOARD LAYOUT
6.5 [0.256] 6.5 [0.256]
1.91 [0.075]
.315 [8] 8.41 [0.331]
15.9 [0.626] 17.91 [0.705]
Ø 2.11 [0.083] (2x)
Ø 2.34 [0.092] (5x)
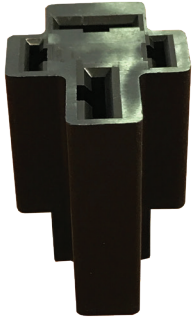8.43 [0.332] .332 [8.43]
Dimensions mm [inches]

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

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

- RoHS Compliant

- Note: Not suitable for DG85D at full load current.

24.56 [0.967] 25.76 [1.014]
22.94 [0.903]
29.11 [1.146]
23.65 [0.931]
3.78 [0.149]
Ø 2.01 [0.079] (2x) Locating Pins

PC BOARD LAYOUT
Ø 7.62 [0.300] (2x)
Ø 2.59 [0.102] (4x) 8.67 [0.342]
8.41 [0.331] 2.06 [0.81]
15.9 [0.626] 17.91 [0.705]
Ø 2.11 [0.083] (2x) Ø 2.34 [0.092] (2x)
6.39 [0.250]
16.92 [0.666]
Dimensions mm [inches]

DZ Automotive Relays Catalogue 112323JHM

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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 3/8" blade 10-12 AWG
- RoHS Compliant
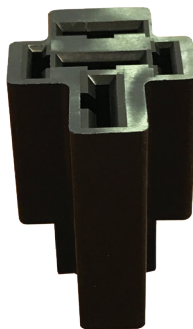- Note: Not suitable for DG85D at full load current

Dimensions mm [inches]
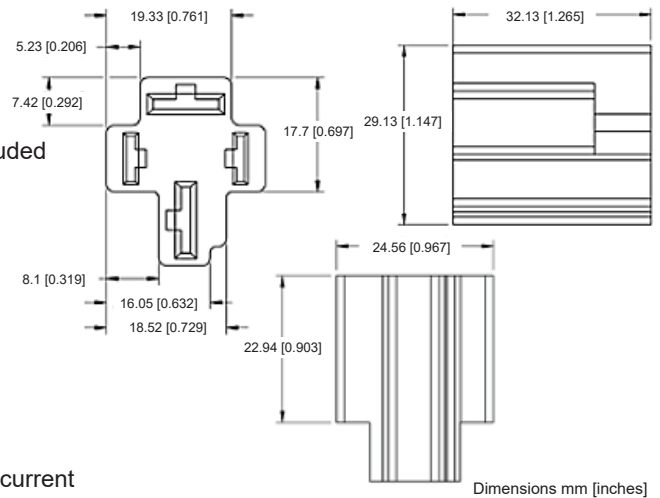
DZ85CD-5-WH - 5 Terminal cable housing socket for maxi-ISO relays
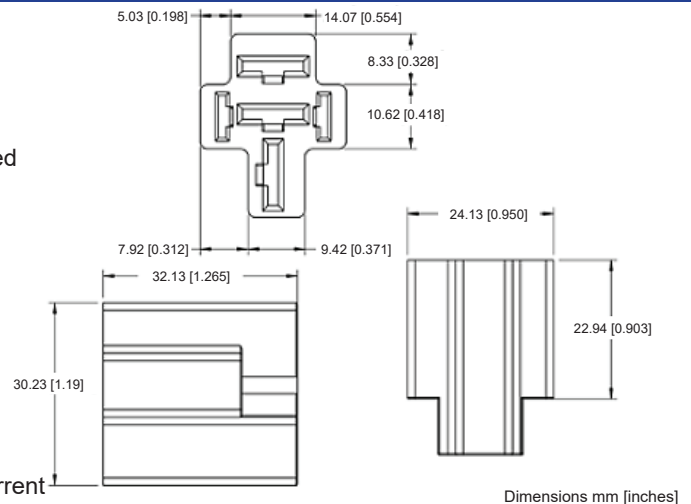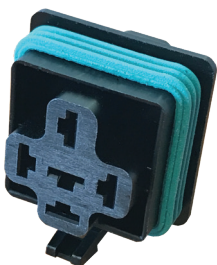
- Heat stabilised thermoplastic, 140°C
- Continuous use temperature rating
- For industry standard terminals - not included
- Typical suitable crimp terminals:
  - AMP 42100 ¼" blade 14-18 AWG
  - AMP 42281 ¼" blade 14-18 AWG
  - AMP 42904 ¼" blade 12-16 AWG
  - AMP 60249 ¼" blade 12-16 AWG
  - AMP 60253 ¼" blade 12-14 AWG
  - AMP 280756 3/8" blade 10-12 AWG
- RoHS Compliant
- Note: Not suitable for DG85D at full load current

Dimensions mm [inches]

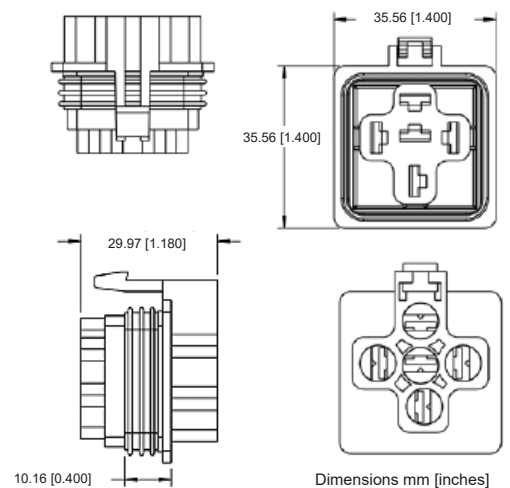## DZ85AB-5-WP Weatherproof socket for mini-ISO relays

- 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

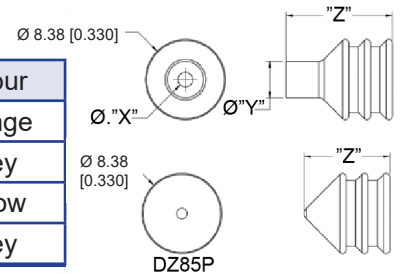Fits Mini-ISO style relays with skirted case, options S1 or S2.

Dimensions mm [inches]

DZ Automotive Relays Catalogue 112323JHM

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DURAKOOL®

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

Part No.	X	Y	Z	Colour
DZ85S-O	1.52 [0.060]	3.81 [0.150]	10.90 [0.429]	Orange
DZ85S-G	2.28 [0.090]	4.83 [0.190]	10.06 [0.396]	Grey
DZ85S-Y	3.30 [0.130]	5.84 [0.230]	9.55 [0.376]	Yellow
DZ85P-G	N/A	N/A	8.97 [0.353]	Grey

Ø 8.38 [0.330]

Ø."X"   Ø"Y"   "Z"

Ø 8.38 [0.330]   "Z"

DZ85P

Choose DZ85S type according to cable diameter.
Use DZ85P-G to blank off center terminal of DZ85AB-5-WP socket for use with 4 terminal (SPST) relays.

Dimensions mm [inches]

Specifications are subject to change without notice. E&OE.

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DURAKOOL®

DURAKOOL®

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