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Part Number:

0192210451

Status:

Active

Description:

Compression Style Ring Tongue Terminal for 4 AWG Wire, Stud Style 10, Un-Plated

Documents:

Drawing (PDF)

RoHS Certificate of Compliance (PDF)

Agency Certification

|     |         |
|-----|---------|
| CSA | LR18689 |
| UL  | E32244  |

General

|                         |                          |
|-------------------------|--------------------------|
| Product Family          | Ring and Spade Terminals |
| Series                  | 19221                    |
| Comments                | Heavy Duty               |
| Crimp Quality Equipment | Yes                      |
| Mil-Spec                | N/A                      |
| Product Name            | Battery Cable Lug        |
| Type                    | Ring                     |

Physical

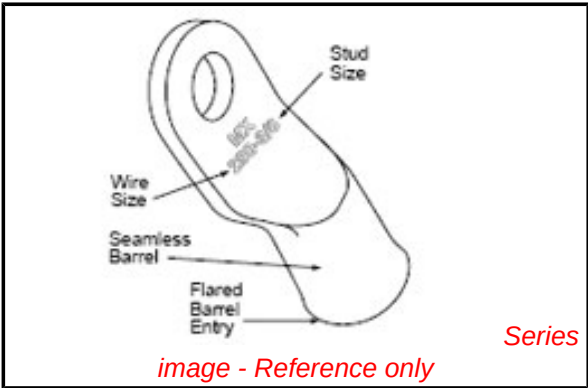
|                              |                      |
|------------------------------|----------------------|
| Barrel Type                  | Closed               |
| Insulation                   | None                 |
| Material - Plating Mating    | Tin                  |
| Packaging Type               | Bag                  |
| Stud Size                    | 10 (M5)              |
| Termination Interface: Style | Crimp or Compression |
| Wire Insulation Diameter     | N/A                  |
| Wire Size AWG                | 4                    |
| Wire Size mm²                | 96.3 - 117.0         |

Material Info

|                 |         |
|-----------------|---------|
| Old Part Number | BCL-410 |
|-----------------|---------|

Reference - Drawing Numbers

|               |              |
|---------------|--------------|
| Sales Drawing | SD-19221-010 |
|---------------|--------------|



EU RoHS

ELV and RoHS  
Compliant

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Reviewed

Need more information on product  
environmental compliance?

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
For a multiple part number RoHS Certificate of  
Compliance, [click here](#)

Please visit the [Contact Us](#) section for any  
non-product compliance questions.

China RoHS



Search Parts in this Series

19221Series

Application Tooling | FAQ

Tooling specifications and manuals are  
found by selecting the products below.  
Crimp Height Specifications are then  
contained in the Application Tooling  
Specification document.

Global

| Description                                                              | Product #  |
|--------------------------------------------------------------------------|------------|
| Putt Pump Dieless<br>Head System                                         | 0192860065 |
| Manual tool for<br>Crimping non-<br>insulated 8AWG thru<br>4/0 Terminals | 0192940008 |
| Manual Putt Pump<br>Hydraulic System,<br>Die set required                | 0192860117 |
| Die Set (large) for<br>the HHLS Hydraulic<br>Crimper                     | 0192900007 |

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|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                           |                           |                        |                           |                         |                         |            |            |                |                     |                     |                     |                     |                     |                     |   |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------|---------------------------|------------------------|---------------------------|-------------------------|-------------------------|------------|------------|----------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---|
|                                        | 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 12                   | 11                        | 10                        | 9                      | 8                         | 7                       | 6                       | 5          | 4          | 3              | 2                   | 1                   |                     |                     |                     |                     |   |
|                                        | UNPLATED MATERIAL NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | UNPLATED ENG. NUMBER | UNPLATED MAT. NO. ON TAPE | UNPLATED ENG. NO. ON TAPE | PLATED MATERIAL NUMBER | PLATED ENGINEERING NUMBER | PLATED MAT. NO. ON TAPE | PLATED ENG. NO. ON TAPE | SEE DETAIL | STUD SIZE  | AWG WIRE RANGE | "S"<br>±.010/(0.25) | "L"<br>±.030/(0.76) | "W"<br>±.020/(0.50) | "C"<br>±.040/(1.02) | "B"<br>±.015/(0.38) | "T"<br>±.015/(0.38) |   |
| J                                      | 1922 I0451                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-410              | ---                       | ---                       | 1922 I0452             | BCL-410-PL                | ---                     | ---                     | ---        | 10/(4.83)  | 4              | .214/(5.45)         | 1.500/(38.10)       | .531/(13.49)        | .429/(10.90)        | .286/(7.26)         | .080/(2.03)         | J |
|                                        | 1922 I0404                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-414              | ---                       | ---                       | 1922 I0230             | BCL-414-PL                | ---                     | ---                     | ---        | 1/4/(6.4)  | 4              | .278/(7.06)         | 1.500/(38.10)       | .531/(13.49)        | .429/(10.90)        | .286/(7.26)         | .080/(2.03)         |   |
|                                        | 1922 I0405                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-4516             | ---                       | ---                       | 1922 I0231             | BCL-4516-PL               | 190820025               | BCL-4516-PLT            | D          | 5/16/(7.9) | 4              | .340/(8.64)         | 1.500/(38.10)       | .531/(13.49)        | .429/(10.90)        | .286/(7.26)         | .080/(2.03)         |   |
|                                        | 1922 I0461                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-4516-WP          | ---                       | ---                       | 1922 I0460             | BCL-4516-WP-PL            | ---                     | ---                     | ---        | 5/16/(7.9) | 4              | .340/(8.64)         | 1.531/(38.89)       | .625/(15.88)        | .397/(10.08)        | .286/(7.26)         | .080/(2.03)         |   |
|                                        | 1922 I0383                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-438              | ---                       | ---                       | 1922 I0232             | BCL-438-PL                | 190820026               | BCL-438-PLT             | E          | 3/8/(9.5)  | 4              | .400/(10.16)        | 1.500/(38.10)       | .531/(13.49)        | .429/(10.90)        | .286/(7.26)         | .080/(2.03)         |   |
|                                        | 1922 I0458                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-438-WP           | ---                       | ---                       | 1922 I0456             | BCL-438-WP-PL             | 190820027               | BCL-438-WP-PLT          | E          | 3/8/(9.5)  | 4              | .400/(10.16)        | 1.531/(38.89)       | .625/(15.88)        | .397/(10.08)        | .286/(7.26)         | .080/(2.03)         |   |
| I                                      | 1922 I0459                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-438-XWP          | ---                       | ---                       | 1922 I0457             | BCL-438-XWP-PL            | ---                     | ---                     | ---        | 3/8/(9.5)  | 4              | .400/(10.16)        | 1.688/(42.88)       | .766/(19.46)        | .444/(11.28)        | .286/(7.26)         | .100/(2.54)         | I |
|                                        | 1922 I0453                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-412              | ---                       | ---                       | 1922 I0454             | BCL-412-PL                | ---                     | ---                     | ---        | 1/2/(12.7) | 4              | .520/(13.21)        | 1.688/(42.88)       | .766/(19.46)        | .444/(11.28)        | .286/(7.26)         | .100/(2.54)         |   |
|                                        | 1922 I0419                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-214              | ---                       | ---                       | 1922 I0418             | BCL-214-PL                | 190820001               | BCL-214-PLT             | C          | 1/4/(6.4)  | 2              | .278/(7.06)         | 1.625/(41.28)       | .625/(15.88)        | .437/(11.10)        | .336/(8.53)         | .095/(2.41)         |   |
|                                        | 1922 I0400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-2516             | ---                       | ---                       | 1922 I0233             | BCL-2516-PL               | 190820002               | BCL-2516-PLT            | C          | 5/16/(7.9) | 2              | .340/(8.63)         | 1.625/(41.28)       | .625/(15.88)        | .437/(11.10)        | .336/(8.53)         | .095/(2.41)         |   |
|                                        | 1922 I0380                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-238              | ---                       | ---                       | 1922 I0235             | BCL-238-PL                | ---                     | ---                     | ---        | 3/8/(9.5)  | 2              | .400/(10.16)        | 1.625/(41.28)       | .625/(15.88)        | .437/(11.10)        | .336/(8.53)         | .095/(2.41)         |   |
|                                        | 1922 I0564                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-238-WP           | ---                       | ---                       | 1922 I0565             | BCL-238-WP-PL             | ---                     | ---                     | ---        | 3/8/(9.5)  | 2              | .400/(10.16)        | 1.750/(44.45)       | .750/(19.05)        | .474/(12.04)        | .336/(8.53)         | .095/(2.41)         |   |
|                                        | 1922 I0399                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-212-WP           | ---                       | ---                       | 1922 I0236             | BCL-212-WP-PL             | ---                     | ---                     | ---        | 1/2/(12.7) | 2              | .520/(13.21)        | 1.750/(44.45)       | .750/(19.05)        | .474/(12.04)        | .336/(8.53)         | .095/(2.41)         |   |
| H                                      | 1922 I0594                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-110              | ---                       | ---                       | 1922 I0595             | BCL-110-PL                | ---                     | ---                     | ---        | #10/(4.83) | 1              | .214/(5.45)         | 1.718/(43.64)       | .656/(16.66)        | .446/(11.33)        | .360/(9.14)         | .100/(2.54)         | H |
|                                        | 1922 I0421                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-114              | ---                       | ---                       | 1922 I0420             | BCL-114-PL                | ---                     | ---                     | ---        | 1/4/(6.4)  | 1              | .278/(7.06)         | 1.718/(43.64)       | .656/(16.66)        | .446/(11.33)        | .360/(9.14)         | .100/(2.54)         |   |
|                                        | 1922 I0396                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-1516             | ---                       | ---                       | 1922 I0237             | BCL-1516-PL               | ---                     | ---                     | ---        | 5/16/(7.9) | 1              | .340/(8.63)         | 1.718/(43.64)       | .656/(16.66)        | .446/(11.33)        | .360/(9.14)         | .100/(2.54)         |   |
|                                        | 1922 I0378                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-138              | ---                       | ---                       | 1922 I0238             | BCL-138-PL                | ---                     | ---                     | ---        | 3/8/(9.5)  | 1              | .400/(10.16)        | 1.718/(43.64)       | .656/(16.66)        | .446/(11.33)        | .360/(9.14)         | .100/(2.54)         |   |
|                                        | 1922 I0580                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-138-WP           | ---                       | ---                       | 1922 I0581             | BCL-138-WP-PL             | ---                     | ---                     | ---        | 3/8/(9.5)  | 1              | .400/(10.16)        | 1.844/(46.84)       | .750/(19.05)        | .474/(12.04)        | .360/(9.14)         | .100/(2.54)         |   |
|                                        | 1922 I0395                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BCL-112              | ---                       | ---                       | 1922 I0239             | BCL-112-PL                | ---                     | ---                     | ---        | 1/2/(12.7) | 1              | .520/(13.21)        | 1.844/(46.84)       | .750/(19.05)        | .474/(12.04)        | .360/(9.14)         | .100/(2.54)         |   |
| G                                      | <div><div><div>4</div><div>LOGO, AWG &amp; STUD SIZE</div></div><div><div>4</div><div>AWG WIRE SIZE STAMPED ON BARREL</div></div><div><div>FLARED BARREL FOR EASY WIRE ENTRY</div></div><div><div>5</div><div></div></div><div><div>"C"</div><div>"W"</div><div>"S" DIA.</div><div>"L"</div><div>"B" DIA.</div><div>"T"</div></div></div> <div><div>DETAIL C</div><div>DETAIL D</div><div>DETAIL E</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      |                           |                           |                        |                           |                         |                         |            |            |                |                     |                     |                     |                     |                     |                     | G |
| F                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                           |                           |                        |                           |                         |                         |            |            |                |                     |                     |                     |                     |                     |                     | F |
| E                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                           |                           |                        |                           |                         |                         |            |            |                |                     |                     |                     |                     |                     |                     | E |
| D                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                           |                           |                        |                           |                         |                         |            |            |                |                     |                     |                     |                     |                     |                     | D |
| C                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                           |                           |                        |                           |                         |                         |            |            |                |                     |                     |                     |                     |                     |                     | C |
| B                                      | <div>NOTES:<br/>1. FOR INSPECTION SIGHT HOLE, PLEASE CONSULT FACTORY.<br/>2. OTHER STUD SIZES MAY BE AVAILABLE, PLEASE CONSULT FACTORY.<br/>3. MATERIAL: COPPER<br/>PLATING: TIN<br/>4. MARKINGS CAN BE AT EITHER LOCATION SHOWN.<br/>5. IF TONGUE IS TO BE BENT AT ANY ANGLE, IT MUST BE BENT AROUND A RADIUS ONE HALF THE TONGUE THICKNESS.</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                      |                           |                           |                        |                           |                         |                         |            |            |                |                     |                     |                     |                     |                     |                     | B |
| A                                      | <div><div>ADDED DETAIL E<br/>EC NO: ETC2006-0005<br/>2005/11/23<br/>DRWNL:SHADECK<br/>CHKD:JDEROSS<br/>2005/11/23<br/>APPR:JPW/LCK<br/>2005/11/23</div><div>DESCRIPTION<br/>REV</div><div>QUALITY SYMBOLS<br/>▽=0<br/>▽=0</div><div>GENERAL TOLERANCES (UNLESS SPECIFIED)<br/>mm INCH<br/>4 PLACES ±--- ±---<br/>3 PLACES ±--- ±---<br/>2 PLACES ±--- ±---<br/>1 PLACE ±--- ±---<br/>ANGULAR ±---°</div><div>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</div><div>DIMENSION STYLE<br/>IN/MM<br/>DRAWN BY DATE<br/>BE 06/26/02<br/>CHECKED BY DATE<br/>HB 06/26/02<br/>APPROVED BY DATE<br/>RD 06/26/02</div><div>SCALE<br/>---</div><div>DESIGN UNITS<br/>INCH</div><div>THIRD ANGLE PROJECTION</div><div>EYELET STYLE<br/>COPPER TERMINALS<br/>4, 2, &amp; 1 AWG LUGS<br/>MOLEX INCORPORATED</div><div>MATERIAL NO.<br/>SEE CHART</div><div>DOCUMENT NO.<br/>SD-19221-010</div><div>SHEET NO.<br/>1 OF 1</div><div>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</div></div> |                      |                           |                           |                        |                           |                         |                         |            |            |                |                     |                     |                     |                     | A                   |                     |   |
| tb_frame_C_P_ME_T<br>Rev. D 2004/04/02 | 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 11                   | 10                        | 9                         | 8                      | 7                         | 6                       | 5                       | 4          | 3          | 2              | 1                   |                     |                     |                     |                     |                     |   |