



Series image - Reference only

EU RoHS	China RoHS				
ELV and RoHS Compliant					
<p>Search Parts in this Series 19164 Series</p> <p>Application Tooling</p> <hr/> <p>Global</p> <table border="1"><thead><tr><th data-bbox="414 1144 808 1182">Description</th><th data-bbox="808 1144 1531 1182">Product #</th></tr></thead><tbody><tr><td data-bbox="414 1182 808 1228">Hand Crimp Tool, UL Approved</td><td data-bbox="808 1182 1531 1228">0640017400</td></tr></tbody></table>		Description	Product #	Hand Crimp Tool, UL Approved	0640017400
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Hand Crimp Tool, UL Approved	0640017400				

Part Number: **0191640003**

Status: **Active**

Description: Perma-Seal™ Ring Tongue Terminal for 18-22 AWG Wire, Stud Size 10

- Documents:**
- [Drawing \(PDF\)](#)
 - [Product Literature \(PDF\)](#)
 - [Related Catalog Page \(PDF\)](#)

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Part Detail: (show all)○ **General**○ **Physical**○ **Electrical**○ **Material Info****General**

Product Family	Ring and Spade Terminals
Series	<u>19164</u>
Material - Plating Mating	Tin
Mil-Spec	N/A
Product Name	Perma-Seal™
Type	Ring

Physical

Barrel Type	Closed
Flammability	94 V2
Insulation	NiAc(TM)
Material - Metal	Copper
Packaging Type	Box
Stud Size	10 (M5)
Wire Insulation Diameter	5.97mm (.235")
Wire Size AWG	18
Wire Size AWG	20
Wire Size AWG	22
Wire Size mm ²	0.38 - 0.96

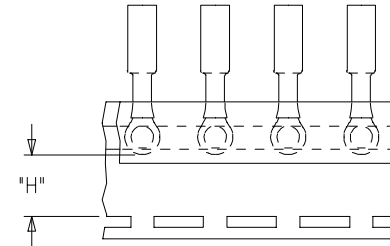
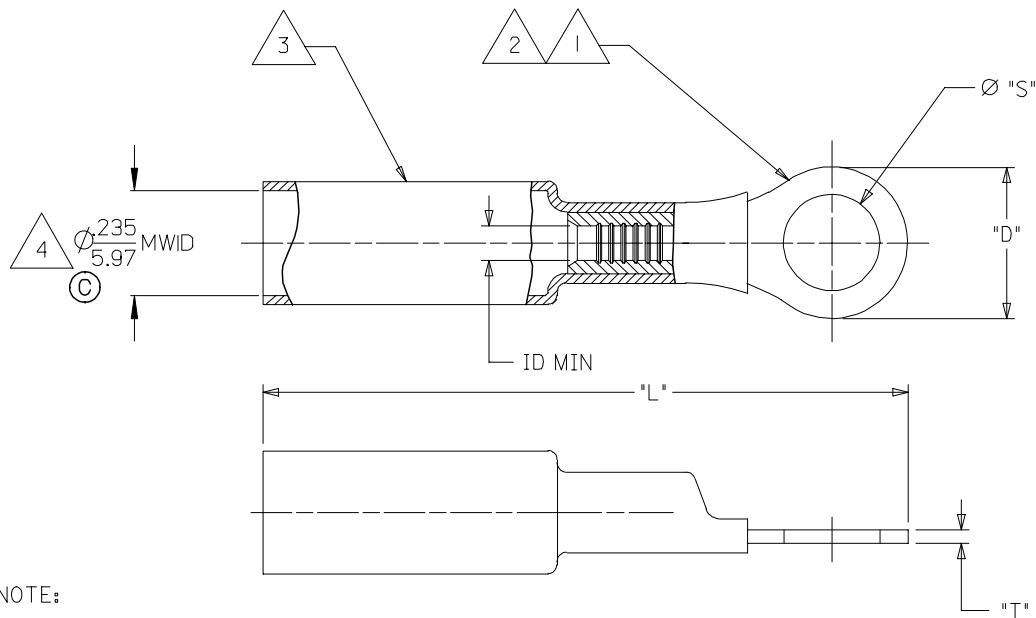
Electrical

CSA	LR18689
UL	E32244

Material Info

Old Part Number	SA-221-10
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	10	9	8	7	6	5	4	3	2	1	
F	MATERIAL NUMBER	ENGINEERING NUMBER	MATERIAL NUMBER ON TAPE	ENGINEERING NUMBER ON TAPE	STUD SIZE	HOLE "S" ± 0.005 ± 0.03	"D" MAX	"H" ± 0.10 ± 0.25	"L" MAX	"T" REF	ID MIN
	191640085	SA-221-06	---	---	#6	$\varnothing .146/3.71$	$\varnothing .32/8.1$	---	1.46/37.1	.028/0.71	.064/1.63
	191640086	SA-221-08	191640419	SA-221-08T	#8	$\varnothing .173/4.39$	$\varnothing .32/8.1$.534/13.56	1.46/37.1	.028/0.71	.064/1.63
	191640003	SA-221-10	191640306	SA-221-10T	#10	$\varnothing .198/5.03$	$\varnothing .32/8.1$.534/13.56	1.46/37.1	.028/0.71	.064/1.63
	191640004	SA-222-14	191640844	SA-222-14T	1/4	$\varnothing .265/6.73$	$\varnothing .48/12.2$.340/8.65	1.66/42.2	.028/0.71	.055/1.40
	191640005	SA-226-38	191640845	SA-226-38T	3/8	$\varnothing .390/9.91$	$\varnothing .54/13.7$.328/8.33	1.95/49.5	.032/0.81	.055/1.40



NOTE:

- 1. TERMINAL MATERIAL: COPPER ALLOY
- 2. FINISH: ELECTRO TIN PLATE.
- 3. INSULATION MATERIAL: HEAT SHRINKABLE TUBING WITH HOTMELT ADHESIVE INNER LINER. COLOR: RED.
- 4. MWID = MAXIMUM WIRE INSULATION DIAMETER.

SALES DRAWING

CHANGED MWID EC NO: ETC2006-0154 DR: WNASAYDEH 2005/12/21 CHKD: ILOMASTRO 2005/12/21 APPR: JPAMLIK 2005/12/21	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM	SCALE ---	DESIGN UNITS INCH	THIRD ANGLE PROJECTION																											
	$\nabla=0$ $\nabla=0$	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>\pm---</td> <td>\pm---</td> </tr> <tr> <td>3 PLACES</td> <td>± 0.13</td> <td>$\pm .005$</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>$\pm .010$</td> </tr> <tr> <td>1 PLACE</td> <td>\pm---</td> <td>\pm---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	\pm ---	\pm ---	3 PLACES	± 0.13	$\pm .005$	2 PLACES	± 0.25	$\pm .010$	1 PLACE	\pm ---	\pm ---	<table border="1"> <thead> <tr> <th>DRAWN BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>BENDERLE</td> <td>2005/5/14</td> </tr> <tr> <th>CHECKED BY</th> <th>DATE</th> </tr> <tr> <td>HBEITZEL</td> <td>2005/5/14</td> </tr> <tr> <th>APPROVED BY</th> <th>DATE</th> </tr> <tr> <td>RDEROSS</td> <td>2005/5/14</td> </tr> </tbody> </table>	DRAWN BY	DATE	BENDERLE	2005/5/14	CHECKED BY	DATE	HBEITZEL	2005/5/14	APPROVED BY	DATE	RDEROSS	2005/5/14	TITLE		
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