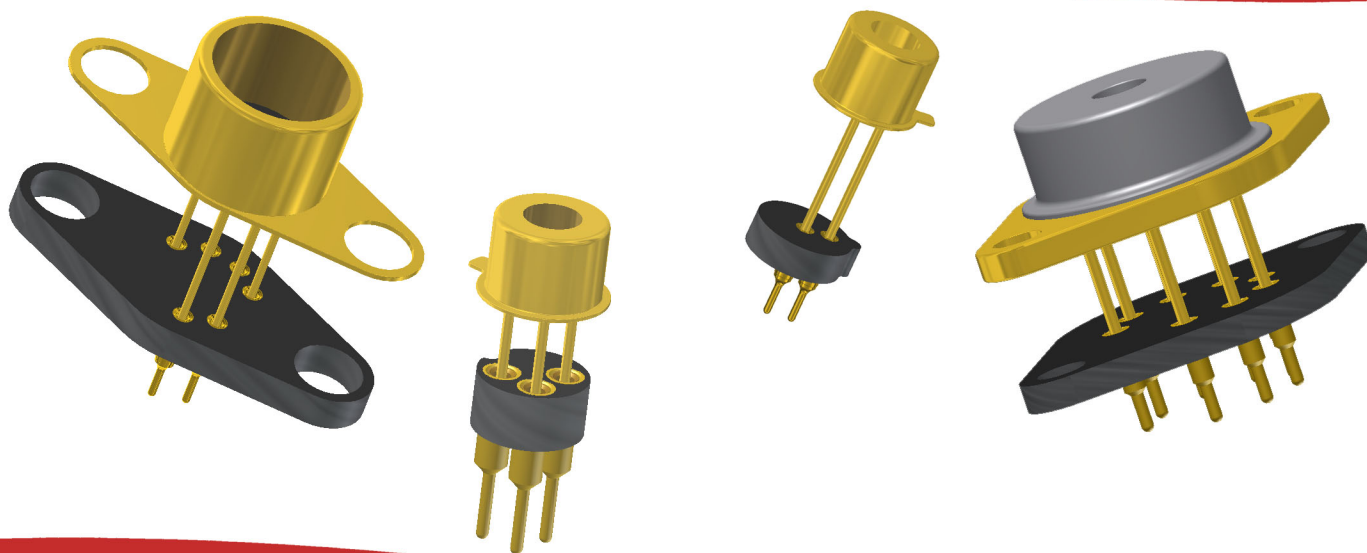




RoHS Compliant  
ISO 9001  
Certified

**OPTOELECTRONIC SOCKETS FOR**

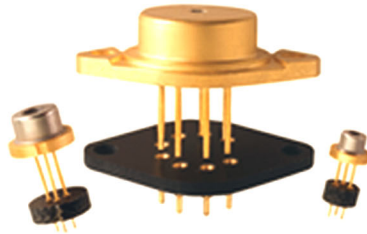
**RALTRON**



***Largest Line of High Reliability Sensor Sockets  
with Andon's Unique Senstac™ Contact***

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## **Optoelectronic Sockets**

*High reliability sockets that will cost effectively:*

*Protect  
Test  
Assemble  
and*

*Enable Replacing of Opto Devices*

- Solder sockets on the PCB
- Plug-in sensors after assembly
- Eliminate ESD from handling
- Eliminate damage from soldering temperatures
- Eliminate damage from cleaning solvents
- Avoid cracking the glass seal
- Reduce shock damage to wire bonds

**Customers** will appreciate knowing that there are ANDON sockets available

**Producers** of optoelectronic devices may list ANDON on their engineering drawings and website to assist their customers in design engineering.

**Distributors** have an opportunity to increase their revenue by selling ANDON sockets with the sales of their optoelectronic devices.

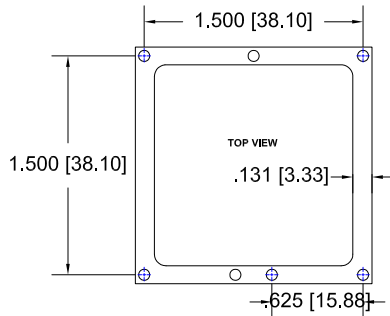
RALTRON ELECTRONICS						
RALTRON ELECTRONICS Model Number	Andon Part Number Replace "XXX" with Terminal Type	Terminal Type		Pin Ø [in]	Figure Number	Page Number
		Thru-Hole	Surface Mount			
TYPE AS (HC-49/S)	CSP192-02-01-XXX-R27-L14	01S	93S	.018	19	6
TYPE AS 3PIN (HC-49/S)	CSP192-03-01-XXX-R27-L14	01S	93S	.018	21	6
UM-5	C15-02-02-04-XXX-R27-L14	01S	93S	.018	20	6
UM-4	C15-02-02-04-XXX-R27-L14	01S	93S	.018	20	6
TYPE A (HC-49/U)	CSP192-02-01-XXX-R27-L14	01S	93S	.018	19	6
TYPE B (HC-51/U)	C486-002-02-01-XXX-R27-L14	295V	439V	.030	22	6
TYPE C (UM-1)	C15-02-02-04-XXX-R27-L14	01S	93S	.018	20	6
3 LEAD BASE OPTION 3PIN	CSP192-03-01-01S-R27-L14	01S	93S	.018	21	6
10H8D	CSP1260-06-01-XXX-R27-L14	295V	439V	.030	23	6
2148D	CSP1260-06-01-XXX-R27-L14	295V	439V	.030	23	6
10H12D	CSP1260-06-01-XXX-R27-L14	295V	439V	.030	23	6
10H15D	CSP1260-06-01-XXX-R27-L14	295V	439V	.030	23	6
21H15D	CSP1260-06-01-XXX-R27-L14	295V	439V	.030	23	6
10H30D	CSP1260-06-01-XXX-R27-L14	295V	439V	.030	23	6
21H30D	CSP1260-06-01-XXX-R27-L14	295V	439V	.030	23	6
10T8D	CSP598-02-01-XXX-R27-L14	295V	439V	.030	24	6
21T8D	CSP598-02-01-XXX-R27-L14	295V	439V	.030	24	6
10T12D	CSP598-02-01-XXX-R27-L14	295V	439V	.030	24	6
21T12D	CSP598-02-01-XXX-R27-L14	295V	439V	.030	24	6
10T15D	CSP598-02-01-XXX-R27-L14	295V	439V	.030	24	6
21T15D	CSP598-02-01-XXX-R27-L14	295V	439V	.030	24	6
21T30D	CSP598-02-01-XXX-R27-L14	295V	439V	.030	24	6
10T30D	CSP598-02-01-XXX-R27-L14	295V	439V	.030	24	6
10M15A	CSP192-03-01-XXX-R27-L14	01S	93S	.018	21	6
10M30A	CSP192-03-01-XXX-R27-L14	01S	93S	.018	21	6
10M7A	CSP192-03-01-XXX-R27-L14	01S	93S	.018	21	6
21U8A	CSP148-03-01-XXX-R27-L14	400T4	414T4	.012	25	7
21U12A	CSP148-03-01-XXX-R27-L14	400T4	414T4	.012	25	7
21U15A	CSP148-03-01-XXX-R27-L14	400T4	414T4	.012	25	7
21U30	CSP148-03-01-XXX-R27-L14	400T4	414T4	.012	25	7
10MBC	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
10M12C	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
10M15C	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
10M30C	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
10M8D	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
10M8E	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
10M12D	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
10M15D	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
10M15E	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
10M30D	CSP354-04-01-XXX-R27-L14	01S	93S	.018	27	7
21UBC	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21U8D	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21UBE	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21U12C	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21U12D	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21U12E	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21U15C	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21U15D	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21U15E	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21U30C	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
21U30D	CSP386-04-01-XXX-R27-L14	01S	93S	.018	26	7
0X3000	C10-1014-05-02-XXX-R27-L14	295V	439V	.030	28	7
0X8000	C10-7524-05-01-XXX-R27-L14	295V	439V	.030	15	5
0X5100	CSP590-05-01-XXX-R27-L14	01S	93S	.018	16	5
0X4000	CSP1360-05-01-XXX-R27-L14	295V	439V	.030	17	5

RALTRON ELECTRONICS						
RALTRON ELECTRONICS Model Number	Andon Part Number Replace "XXX" with Terminal Type	Terminal Type		Pin Ø [in]	Figure Number	Page Number
		Thru-Hole	Surface Mount			
VC72	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
VC74	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
OX6749	C10-1514-07-03-XXX-R27-L14	433E	285E	.040	1	3
TX146	CSP590-05-02-XXX-R27-L14	295V	439V	.030	2	3
TV146	CSP590-05-02-XXX-R27-L14	295V	439V	.030	2	3
TX048	C10-716-04-01-XXX-R27-L14	295V	439V	.030	3	3
TV048	C10-716-04-01-XXX-R27-L14	295V	439V	.030	3	3
VH6131 SERIES	CSP1360-05-01-XXX-R27-L14	295V	439V	.030	17	5
CX21	C10-308-04-03-XXX-R27-L14	01S	93S	.018	4	3
CX22	C10-308-04-03-XXX-R27-L14	01S	93S	.018	4	3
CX23	C10-308-04-03-XXX-R27-L14	01S	93S	.018	4	3
CO-13	C10-308-04-03-XXX-R27-L14	01S	93S	.018	4	3
CO-19	C10-308-04-03-XXX-R27-L14	01S	93S	.018	4	3
CO-12	C10-308-04-03-XXX-R27-L14	01S	93S	.018	4	3
TX100	C10-1020-04-01-XXX-R27-L14	295V	439V	.030	5	3
TV100	C10-1020-04-01-XXX-R27-L14	295V	439V	.030	5	3
SY10	C10-1634-34-01-XXX-R27-L14	295V	439V	.030	7	4
SY15-S3	C10-1634-34-01-XXX-R27-L14	295V	439V	.030	7	4
SY0F-HF	C10-1634-34-01-XXX-R27-L14	295V	439V	.030	7	4
SY0F-HLPL	C10-1828-28-01-XXX-R27-L14	295V	439V	.030	6	3
RSR-K	R200-0403-03T-XXX-R27-L14	01S	93S	.018	10	4
RSR-D	C10-004-04-01-XXX-R27-L14	01S	93S	.018	9	4
RSR-S	C10-004-04-02-XXX-R27-L14	01D	93D	.025	11	4
RSR-B	C10-005-04-01-XXX-R27-L14	01D	93D	.025	8	4
RTX-231	CSP591-03-01-XXX-R27-L14	01S	93S	.018	12	4
RTV-231	CSP591-03-01-XXX-R27-L14	01S	93S	.018	12	4
RTX-781	CSP612-03-01-XXX-R27-L14	01S	93S	.018	29	7
TU/TY-045	C10-314-06-03-XXX-R27-L14	01S	93S	.018	13	5
SY-0001B	C20-1618-18-01-XXX-R27-L14	433E	285E	.040	14	5
SY01-S3F	C20-1618-18-01-XXX-R27-L14	433E	285E	.040	14	5
SY01-S3	C20-1618-18-01-XXX-R27-L14	433E	285E	.040	14	5
OX2000	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
TX 045	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
TV045	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
CX71	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
CX72	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
CX73	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
CO1	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
CO15	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5
CO6	C10-314-04-01-XXX-R27-L14	01S	93S	.018	18	5

## RALTRON ELECTRONICS *Continued*

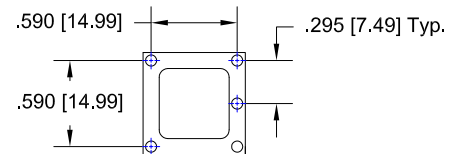
### Socket Terminal Details

Cross Section View Shown Units: in [mm]



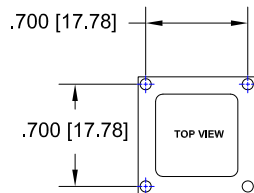
**Fig.1**

Thru-Hole: C10-1514-07-03-**433E**-R27-L14  
Surface Mount: C10-1514-07-03-**285E**-R27-L14



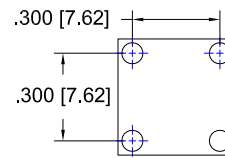
**Fig.2**

Thru-Hole: CSP590-05-02-**295V**-R27-L14  
Surface Mount: CSP590-05-02-**439V**-R27-L14



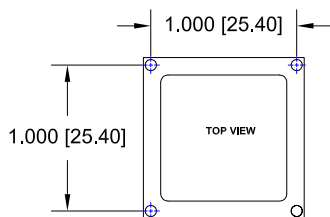
**Fig.3**

Thru-Hole: C10-716-04-01-**295V**-R27-L14  
Surface Mount: C10-716-04-01-**439V**-R27-L14



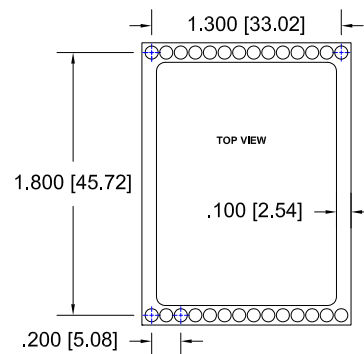
**Fig.4**

Thru-Hole: C10-308-04-03-**01S**-R27-L14  
Surface Mount: C10-308-04-03-**93S**-R27-L14



**Fig.5**

Thru-Hole: C10-1020-04-01-**295V**-R27-L14  
Surface Mount: C10-1020-04-01-**439V**-R27-L14



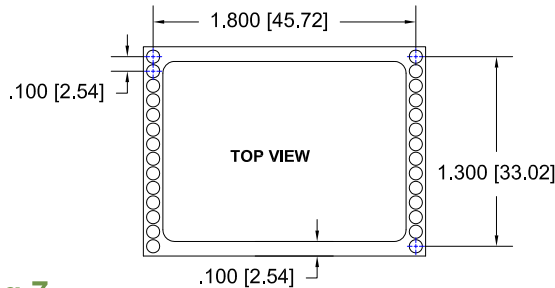
**Fig.6**

Thru-Hole: C10-1828-28-01-**01S**-R27-L14  
Surface Mount: C10-1828-28-01-**93S**-R27-L14

## RALTRON ELECTRONICS *Continued*

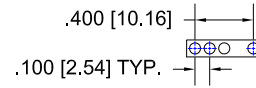
### Socket Terminal Details

Cross Section View Shown Units: in [mm]



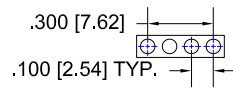
**Fig.7**

Thru-Hole: C10-1634-34-01-01S-R27-L14  
Surface Mount: C10-1634-34-01-93S-R27-L14



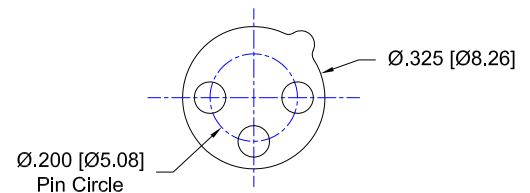
**Fig.8**

Thru-Hole: C10-005-04-01-01D-R27-L14  
Surface Mount: C10-005-04-01-93D-R27-L14



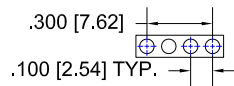
**Fig.9**

Thru-Hole: C10-004-04-01-01S-R27-L14  
Surface Mount: C10-004-04-01-93S-R27-L14



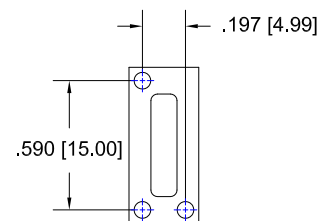
**Fig.10**

Thru-Hole: R200-0403-03T-01S-R27-L14  
Surface Mount: R200-0403-03T-93S-R27-L14



**Fig.11**

Thru-Hole: C10-004-04-02-01D-R27-L14  
Surface Mount: C10-004-04-02-93D-R27-L14



**Fig.12**

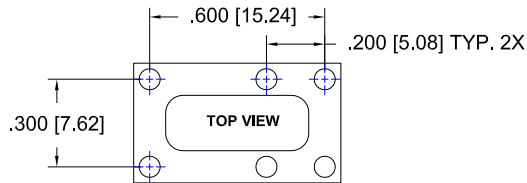
Thru-Hole: CSP591-03-01-01S-R27-L14  
Surface Mount: CSP591-03-01-93S-R27-L14



## RALTRON ELECTRONICS *Continued*

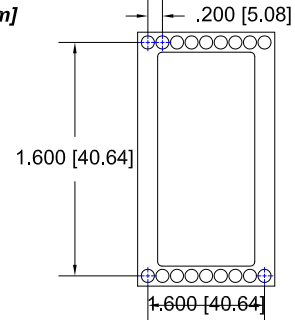
### Socket Terminal Details

Cross Section View Shown Units: in [mm]



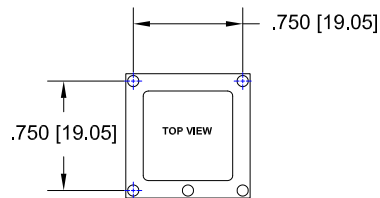
**Fig.13**

Thru-Hole: C10-314-06-03-01S-R27-L14  
Surface Mount: C10-314-06-03-93S-R27-L14



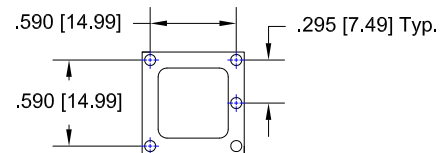
**Fig.14**

Thru-Hole: C20-1618-18-01-433E-R27-L14  
Surface Mount: C20-1618-18-01-285E-R27-L14



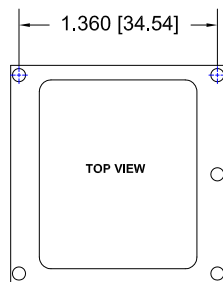
**Fig.15**

Thru-Hole: C10-7524-05-01-295V-R27-L14  
Surface Mount: C10-7524-05-01-439V-R27-L14



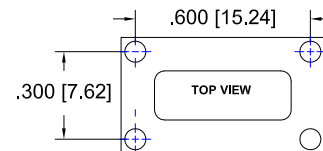
**Fig.16**

Thru-Hole: CSP590-05-01-01S-R27-L14  
Surface Mount: CSP590-05-01-93S-R27-L14



**Fig.17**

Thru-Hole: CSP1360-05-01-295V-R27-L14  
Surface Mount: CSP1360-05-01-439V-R27-L14



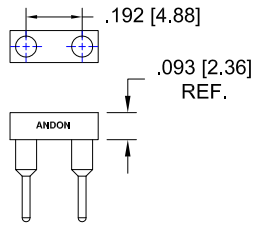
**Fig.18**

Thru-Hole: C10-314-04-01-01S-R27-L14  
Surface Mount: C10-314-04-01-93S-R27-L14

## RALTRON ELECTRONICS *Continued*

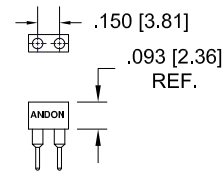
### Socket Terminal Details

Cross Section View Shown Units: in [mm]



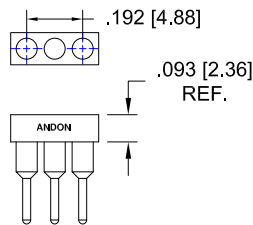
**Fig.19**

Thru-Hole: CSP192-02-01-01S-R27-L14  
Surface Mount: CSP192-02-01-93S-R27-L14



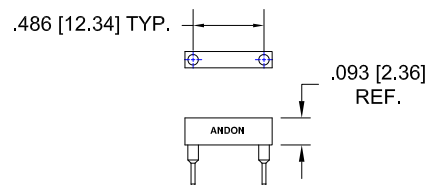
**Fig.20**

Thru-Hole: C15-02-02-04-01S-R27-L14  
Surface Mount: C15-02-02-04-93S-R27-L14



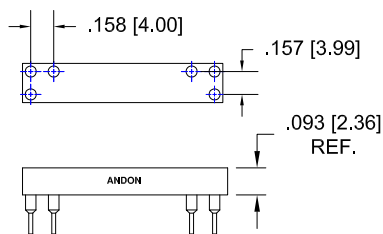
**Fig.21**

Thru-Hole: CSP192-03-01-01S-R27-L14  
Surface Mount: CSP192-03-01-93S-R27-L14



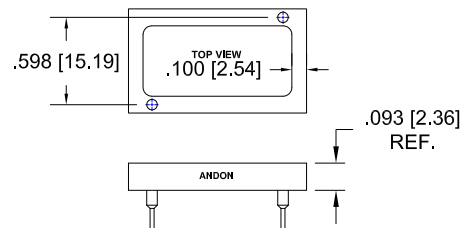
**Fig.22**

Thru-Hole: C486-002-02-01-01S-R27-L14  
Surface Mount: C486-002-02-01-93S-R27-L14



**Fig.23**

Thru-Hole: CSP1260-06-01-01S-R27-L14  
Surface Mount: CSP1260-06-01-93S-R27-L14



**Fig.24**

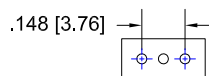
Thru-Hole: CSP598-02-01-295V-R27-L14  
Surface Mount: CSP598-02-01-439V-R27-L14



## RALTRON ELECTRONICS *Continued*

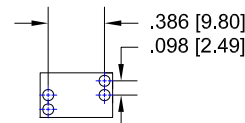
### Socket Terminal Details

Cross Section View Shown Units: in [mm]



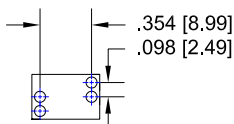
**Fig.25**

Thru-Hole: CSP148-03-01-400T4-R27-L14  
Surface Mount: CSP148-03-01-414T4-R27-L14



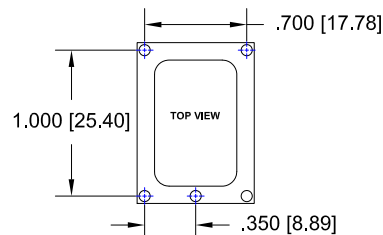
**Fig.26**

Thru-Hole: CSP386-04-01-01S-R27-L14  
Surface Mount: CSP386-04-01-93S-R27-L14



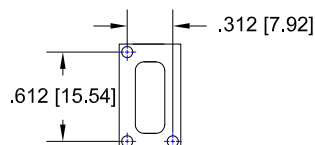
**Fig.27**

Thru-Hole: CSP354-04-01-01S-R27-L14  
Surface Mount: CSP354-04-01-93S-R27-L14



**Fig.28**

Thru-Hole: C10-1014-05-02-295V-R27-L14  
Surface Mount: C10-1014-05-02-439V-R27-L14



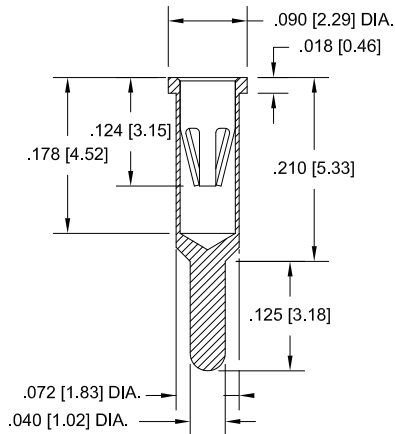
**Fig.29**

Thru-Hole: CSP612-03-01-01S-R27-L14  
Surface Mount: CSP612-03-01-93S-R27-L14

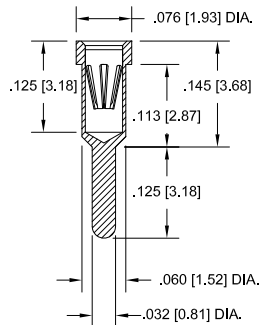
## RALTRON ELECTRONICS Continued

### Socket Terminal Details Cross Section View Shown Units: in [mm]

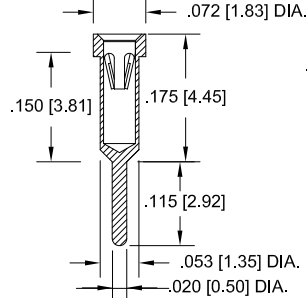
**-433E**



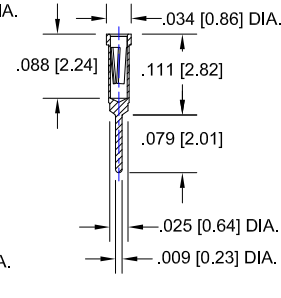
**-295V**



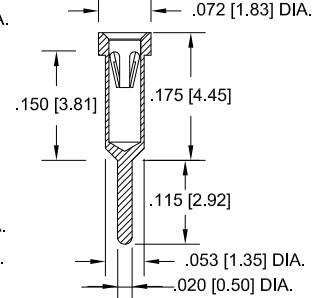
**-01S**



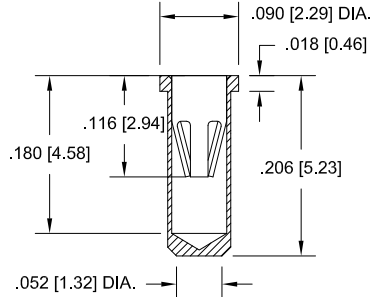
**-400T4**



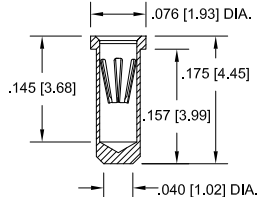
**-01D**



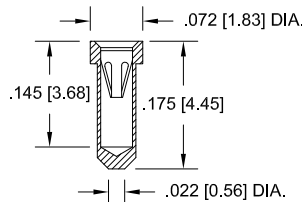
**-285E**



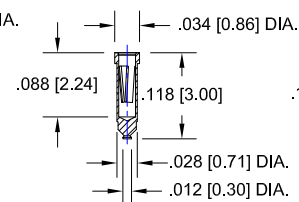
**-439V**



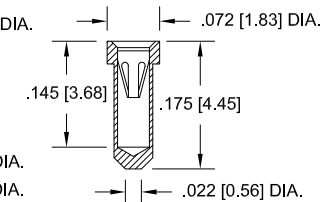
**-93S**



**-414T4**



**-93D**



## Technical Information

### Material:

Insulator: Hi-Temp UL 94V-O  
Terminal: Brass, per ASTM-B136  
Contact: BeCu, Per ASTM-B194

### Plating: RoHS COMPLIANT

R15 TERMINAL: GOLD / CONTACT: GOLD

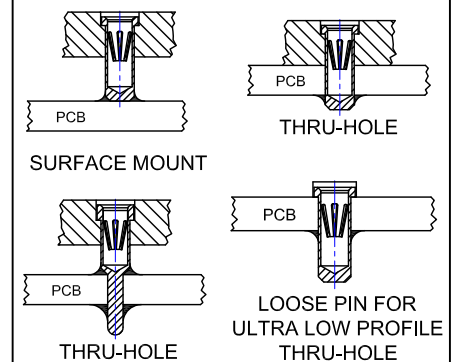
R17 TERMINAL: TIN / CONTACT: GOLD

OTHER PLATINGS AVAILABLE

### Terminal Acceptance and Forces

Thru Hole Terminals				Surface Mount Terminals			
Thru Hole Terminal	Accepts Pin Diameter	Insertion Force	Withdrawal Force	Surface Mount Terminal	Accepts Pin Diameter	Insertion Force	Withdrawal Force
-01S	Ø.018 [Ø0.46]	9.0 oz Avg.	2.0 oz Min	-93S	Ø.018 [Ø0.46]	9.0 oz Avg.	2.0 oz Min
-433E	Ø.040 [Ø1.02]	36.0 oz Avg.	3.9 oz Min	-285E	Ø.040 [Ø1.02]	36.0 oz Avg.	3.9 oz Min
-295V	Ø.030 [Ø0.76]	13.2 oz Avg.	3.5 oz Min	-439V	Ø.030 [Ø0.76]	13.2 oz Avg.	3.5 oz Min
-400T4	Ø.012 [Ø0.30]	1.1 oz Avg.	0.3 oz Min	-414T4	Ø.012 [Ø0.30]	1.1 oz Avg.	0.3 oz Min
-01D	Ø.018 [Ø0.46]	9.5 oz Avg.	3.2 oz Min	-93D	Ø.018 [Ø0.46]	9.5 oz Avg.	3.2 oz Min

### MOUNTING OPTIONS



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"ANDON PROPRIETARY INFORMATION"

RoHS Compliant

\*Sockets are not drawn to scale RALTRON ELECTRONICS 4/2/2015

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