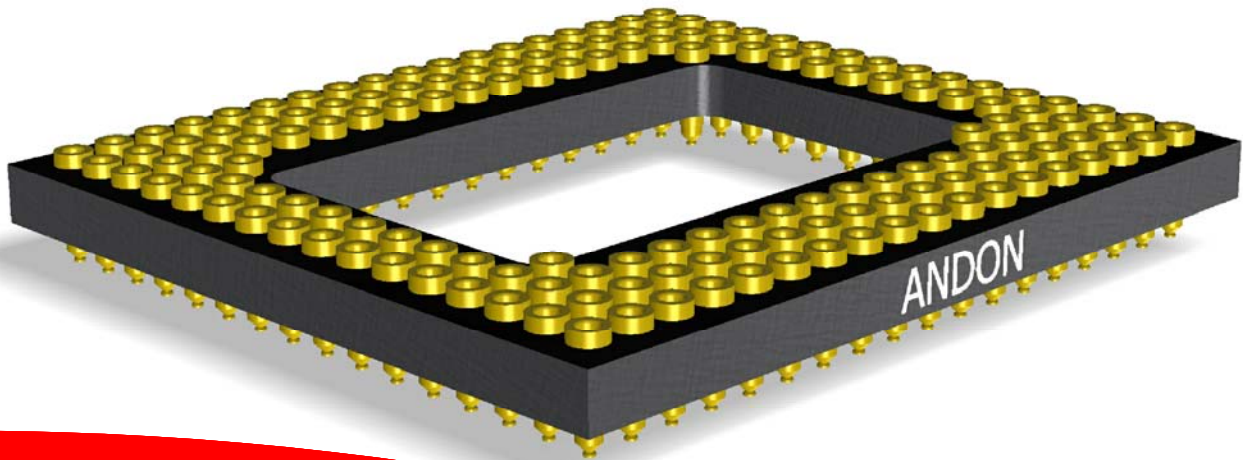




## *High-Reliability Image Sensor Sockets for Gpixel Inc.*

# Gpixel

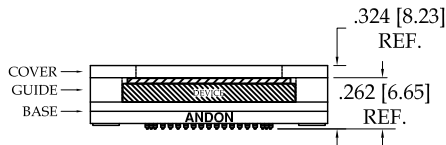
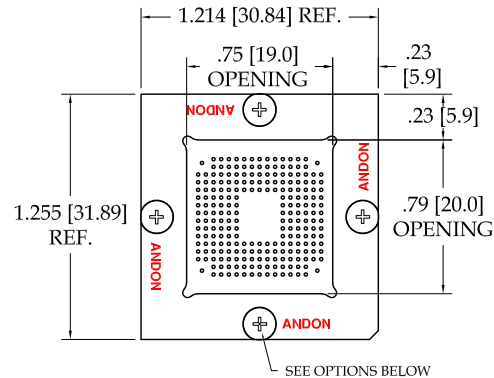
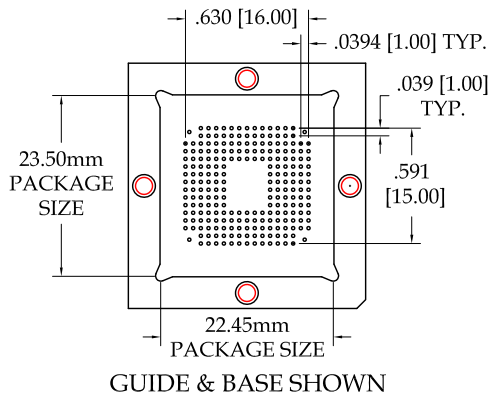


*Featuring Andon's Unique Senstac<sup>™</sup> Contact*

GPIXEL INC.							
GPIXEL INC. Model Number	Andon Part Number Replace "XXX" with Terminal Type	Terminal Type			Pin Ø [in]	Figure Number	Page Number
		Thru-Hole	Surface Mount	Rollerball®			
GL0204	694D-84-XX-XXX-R27-L14-X	TH-491	SM-500	-	-	10	4
GL0402	694D-76-XX-XXX-R27-L14-X	TH-491	SM-500	-	-	16	5
GL0816	10-37-01-258-XXX-R27-L14	400T4	414T4	RB501T4	.012	9	4
GL1608	575-37-02-136-XXX-R27-L14	01M	93M	RB338K	.018	11	4
GL3208	575-45-02-222-XXX-R27-L14	01M	93M	RB338K	.018	12	4
GMAX0504	575-19-29A-263-XXX-R27-L14	01M	93M	RB338K	.018	6	3
GMAX0505	694-230B-XX-XXX-R27-L14-1	TH-491	SM-500	SM-RB593	-	1	1
GMAX0806	10-24-10A-183-XXX-R27-L14	400T4	414T4	RB501T4	.012	8	4
GMAX1205	IS229-15184Q-XXX-R27-L14	01M	93M	RB338K	.018	7	3
GMAX2505	694-230C-XX-XXX-R27-L14-1	TH-491	SM-500	SM-RB593	-	17	6
GMAX2509	694-230D-XX-XXX-R27-L14-1	TH-491	SM-500	SM-RB593	-	18	6
GMAX3265	10-26-40-239-XXX-R27-L14	400T4	414T4	RB501T4	.012	14	5
GMAX4651	585-19-23-238-XXX-R27-L14	75M	384M	-	.018	15	5
GSENSE2011s/2011e	10-18-04A-153-XXX-R27-L14	400T4	414T4	RB501T4	.012	2	2
GSENSE2020BSI	10-18-04A-153-XXX-R27-L14	400T4	414T4	RB501T4	.012	2	2
GSENSE2020s/2020e	10-18-04A-153-XXX-R27-L14	400T4	414T4	RB501T4	.012	2	2
GSENSE400	575-13-87-115-XXX-R27-L14	01M	93M	RB338K	.018	3	2
GSENSE400	575-13-87A-115-XXX-R27-L14	01M	93M	RB338K	.018	3	2
GSENSE400BSI	575-13-87-115-XXX-R27-L14	01M	93M	RB338K	.018	3	2
GSENSE400BSI	575-13-87A-115-XXX-R27-L14	01M	93M	RB338K	.018	3	2
GSENSE4040	575-20-21A-140-XXX-R27-L14	01M	93M	RB338K	.018	5	3
GSENSE5130	10-29-22-249-XXX-R27-L14	400T4	414T4	RB501T4	.012	4	2
GSENSE6060/6060BSI	575-38-03A-250-XXX-R27-L14	01M	93M	RB338K	.018	13	5

See last page for other mounting types including low profile options.  
Heat sink socket available to reduce heat and noise. Contact Andon for details.

### TOP VIEW



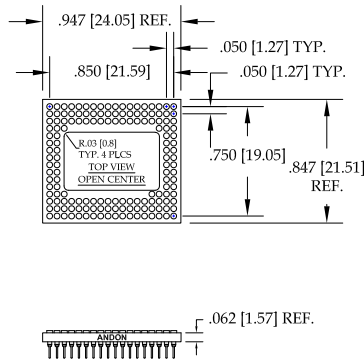
**Fig. 1 230 Pins**

- Thru-Hole:** 694-230B-TH-491-R27-L14-1
- Surface Mount:** 694-230B-SM-500-R27-L14-1
- Rollerball®:** 694-230B-SM-RB593-R27-L14-1

## GPIXEL INC. *Continued*

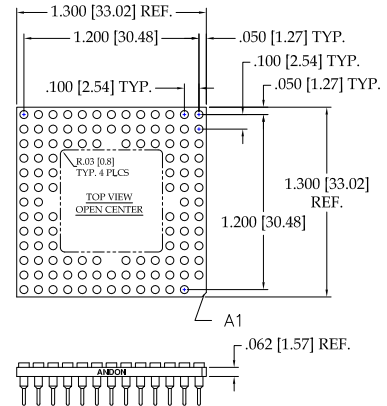
### Image Sensor Socket Footprints

Units: in [mm]



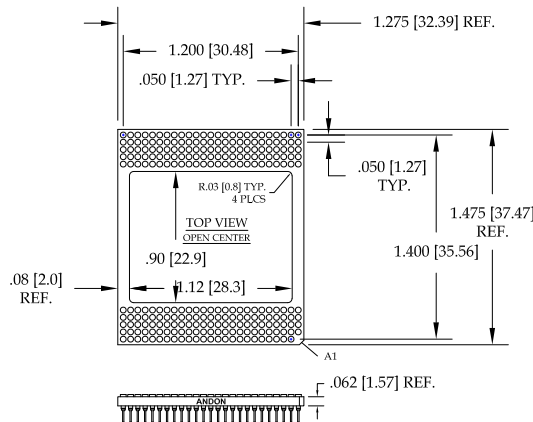
**Fig. 2**      **153 Pins**

- Thru-Hole: 10-18-04A-153-400T4-R27-L14
- Surface Mount: 10-18-04A-153-414T4-R27-L14
- Rollerball®: 10-18-04A-153-RB501T4-R27-L14



**Fig. 3**      **115 Pins**

- Thru-Hole: 575-13-87-115-01M-R27-L14
- Surface Mount: 575-13-87-115-93M-R27-L14
- Rollerball®: 575-13-87-115-RB338K-R27-L14
- WITH OPTIONAL WINDOW
- Thru-Hole: 575-13-87A-115-01M-R27-L14
- Surface Mount: 575-13-87A-115-93M-R27-L14
- Rollerball®: 575-13-87A-115-RB338K-R27-L14



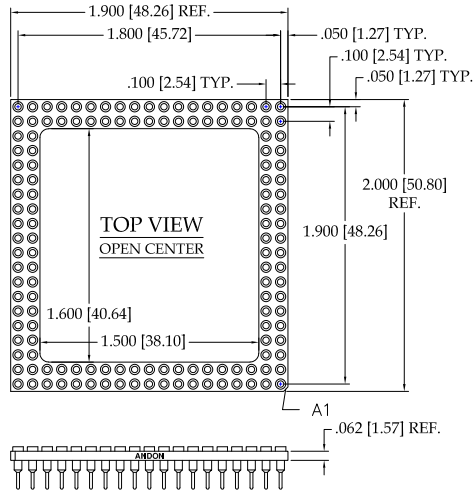
**Fig. 4**      **249 Pins**

- Thru-Hole: 10-29-22-249-400T4-R27-L14
- Surface Mount: 10-29-22-249-414T4-R27-L14
- Rollerball®: 10-29-22-249-RB501T4-R27-L14

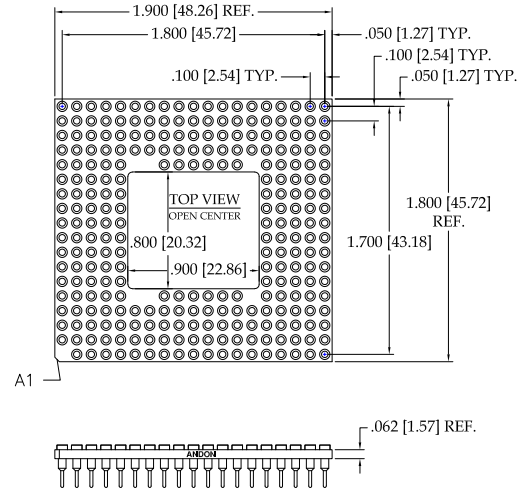
## GPIXEL INC. *Continued*

### Image Sensor Socket Footprints

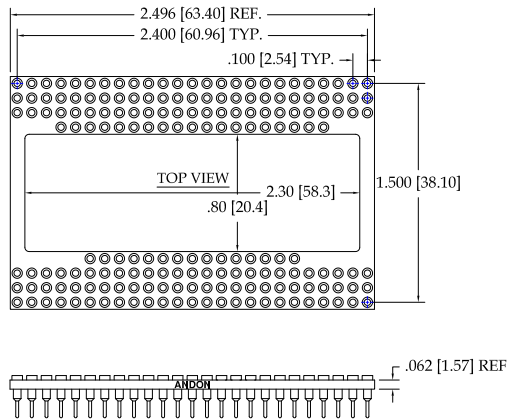
Units: in [mm]



**Fig. 5**                    **140 Pins**  
**Thru-Hole:** 575-20-21A-140-01M-R27-L14  
**Surface Mount:** 575-20-21A-140-93M-R27-L14  
**Rollerball®:** 575-20-21A-140-RB338K-R27-L14



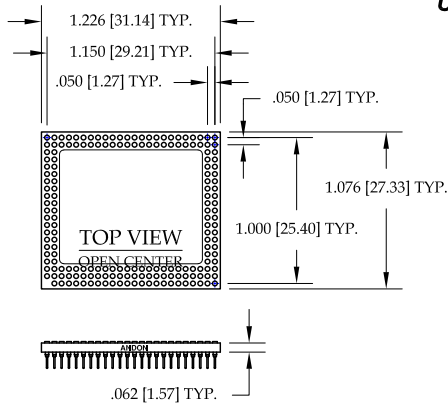
**Fig. 6**                    **263 Pins**  
**Thru-Hole:** 575-19-29A-263-01M-R27-L14  
**Surface Mount:** 575-19-29A-263-93M-R27-L14  
**Rollerball®:** 575-19-29A-263-RB338K-R27-L14



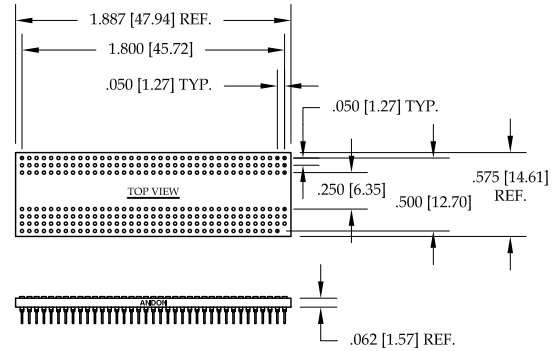
**Fig. 7**                    **184 Pins**  
**Thru-Hole:** IS229-15184Q-01M-R27-L14  
**Surface Mount:** IS229-15184Q-93M-R27-L14  
**Rollerball®:** IS229-15184Q-RB338K-R27-L14

## GPIXEL INC. *Continued* Image Sensor Socket Footprints

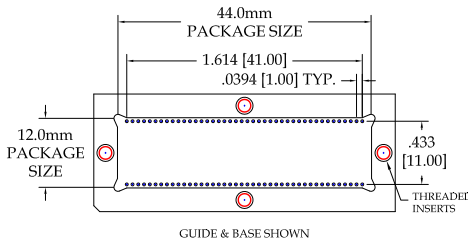
Units: in [mm]



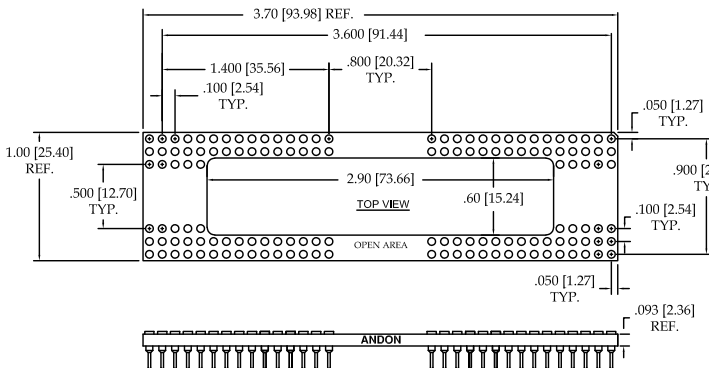
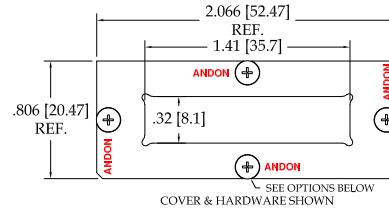
**Fig. 8 183 Pins**  
**Thru-Hole:** 10-24-10A-183-400T4-R27-L14  
**Surface Mount:** 10-24-10A-183-414T4-R27-L14  
**Rollerball®:** 10-24-10A-183-RB501T4-R27-L14



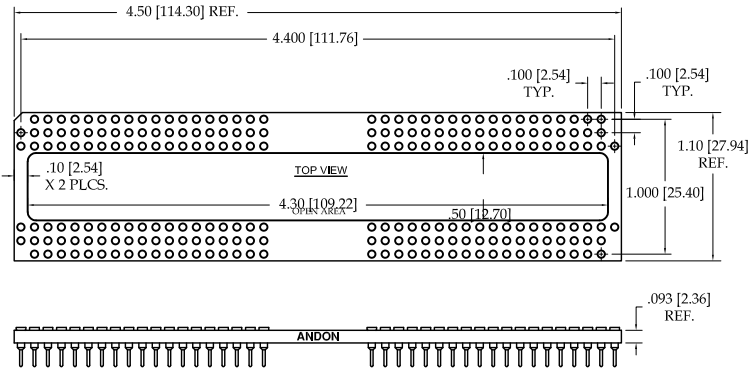
**Fig. 9 258 Pins**  
**Thru-Hole:** 10-37-01-258-400T4-R27-L14  
**Surface Mount:** 10-37-01-258-414T4-R27-L14  
**Rollerball®:** 10-37-01-258-RB501T4-R27-L14



**Fig. 10 84 Pins**  
**Thru-Hole:** 694D-84-TH-491-R27-L14-1  
**Surface Mount:** 694D-84-SM-500-R27-L14-1  
**Rollerball®:** 694D-84-SM-RB593-R27-L14-1



**Fig. 11 136 Pins**  
**Thru-Hole:** 575-37-02-136-01M-R27-L14  
**Surface Mount:** 575-37-02-136-93M-R27-L14  
**Rollerball®:** 575-37-02-136-RB338K-R27-L14



**Fig. 12 222 Pins**  
**Thru-Hole:** 575-45-02-222-01M-R27-L14  
**Surface Mount:** 575-45-02-222-93M-R27-L14  
**Rollerball®:** 575-45-02-222-RB338K-R27-L14

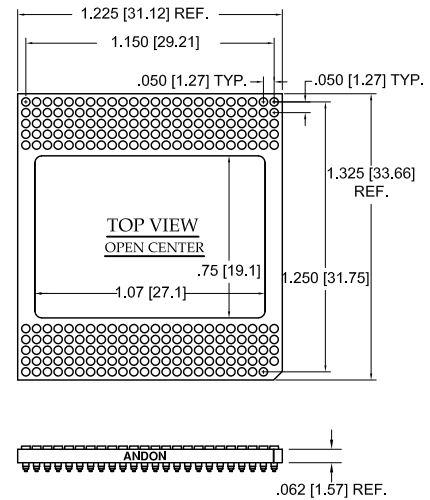
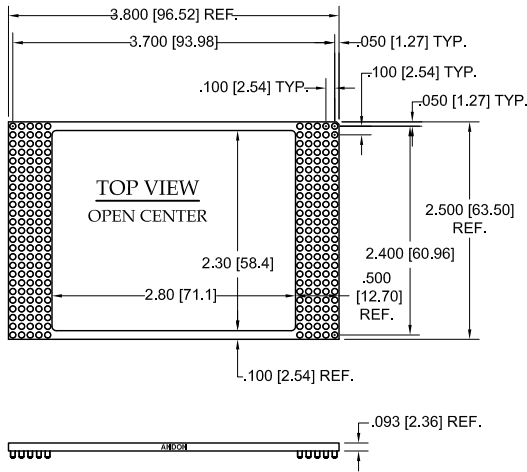
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Rollerball® U.S. PATENT # 6,352,437  
CANADIAN PATENT # 2,388,520

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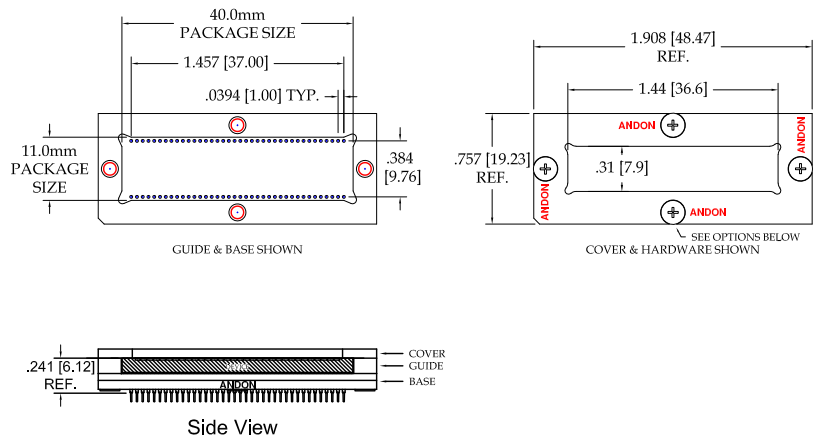
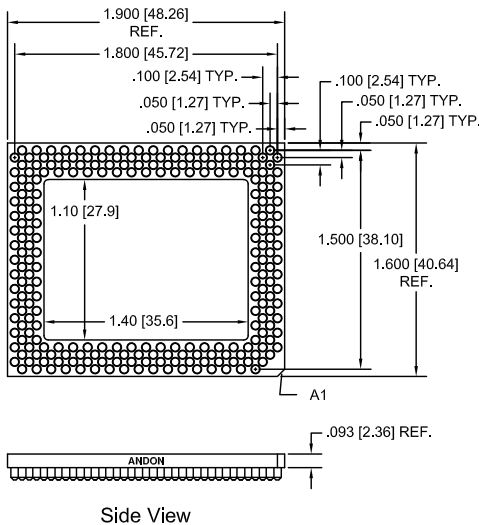
\*Sockets are not drawn to scale GPIXEL INC. 12/10/2019

## GPIXEL INC. *Continued* Image Sensor Socket Footprints Units: in [mm]



**Fig. 13 250 Pins**  
Thru-Hole: 575-38-03A-250-01M-R27-L14  
Surface Mount: 575-38-03A-250-93M-R27-L14  
Rollerball®: 575-38-03A-250-RB338K-R27-L14

**Fig. 14 239 Pins**  
Thru-Hole: 10-26-40-239-400T4-R27-L14  
Surface Mount: 10-26-40-239-414T4-R27-L14  
Rollerball®: 10-26-40-239-RB501T4-R27-L14

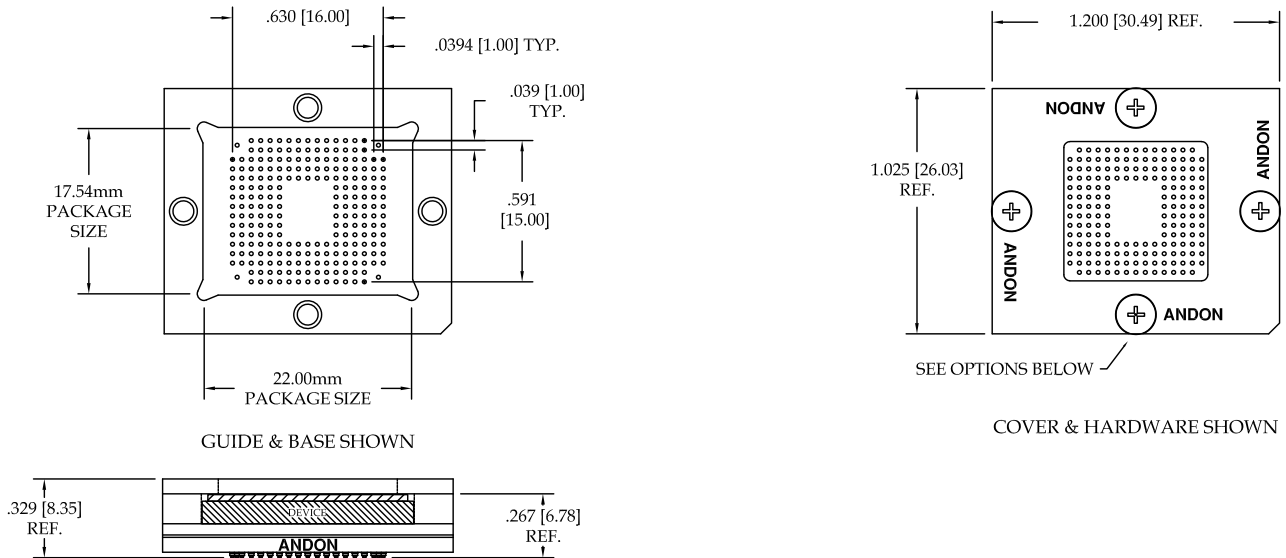


**Fig. 15 238 Pins**  
Thru-Hole: 585-19-23-238-75M-R27-L14  
Surface Mount: 585-19-23-238-384M-R27-L14

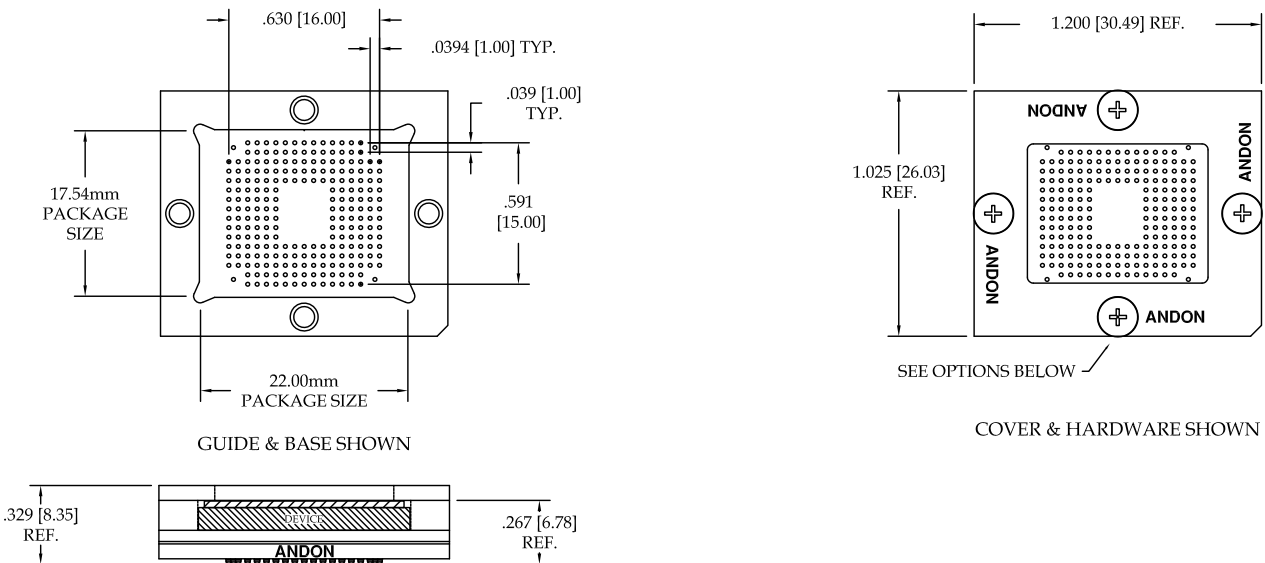
**Fig. 16 76 Pins**  
Thru-Hole: 694D-76-TH-491-R27-L14-1  
Surface Mount: 694D-76-SM-500-R27-L14-1  
Rollerball®: 694D-76-SM-RB593-R27-L14-1



## GPIXEL INC. *Continued* Image Sensor Socket Footprints Units: in [mm]



**Fig. 17 230 Pins**  
**Thru-Hole:** 694-230C-TH-491-R27-L14-1  
**Surface Mount:** 694-230C-SM-500-R27-L14-1  
**Rollerball®:** 694-230C-SM-RB593-R27-L14-1



**Fig. 18 230 Pins**  
**Thru-Hole:** 694-230D-TH-491-R27-L14-1  
**Surface Mount:** 694-230D-SM-500-R27-L14-1  
**Rollerball®:** 694-230D-SM-RB593-R27-L14-1

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**RoHS Compliant**

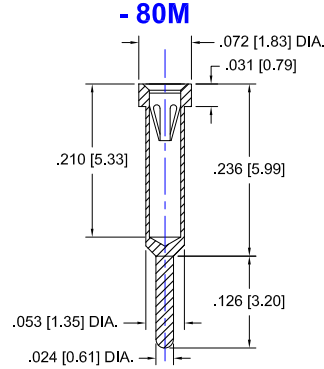
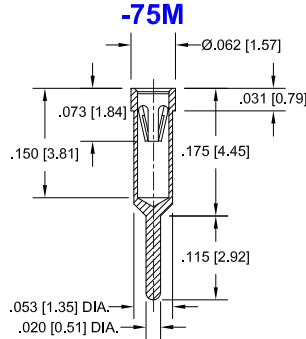
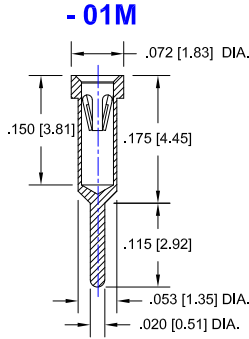
\*Sockets are not drawn to scale GPIXEL INC. 12/10/2019

## GPIXEL INC. *Continued*

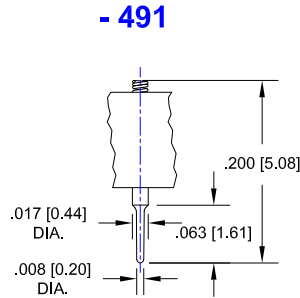
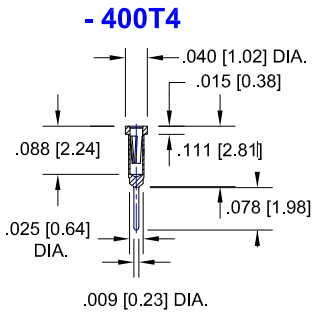
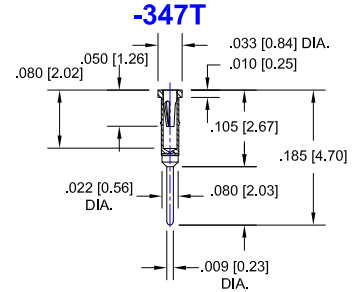
### Image Sensor Terminal Options

Units: in [mm]

### THRU HOLE OPTION



"Longer version of -01M"

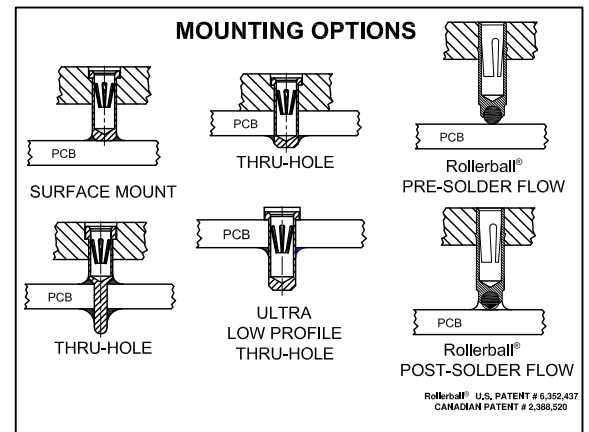


## Technical Information

**Plating: RoHS COMPLIANT**  
**R27 TERMINAL: GOLD / CONTACT: GOLD**  
**R29 TERMINAL: MATTE TIN / CONTACT: GOLD**  
**R32 TERMINAL: MATTE TIN / CONTACT: TIN**  
**OTHER PLATINGS AVAILABLE**

### Material:

Insulator: Hi-Temp UL 94V-O  
 Terminal: Brass, per ASTM-B16  
 Contact: BeCu, Per ASTM-B194



"ANDON PROPRIETARY INFORMATION"

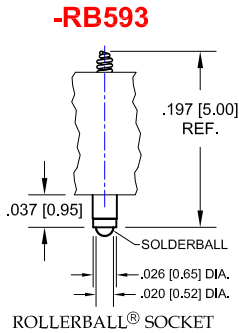
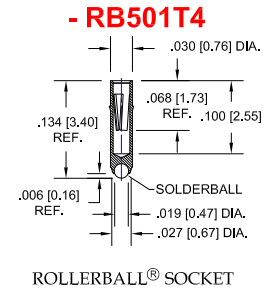
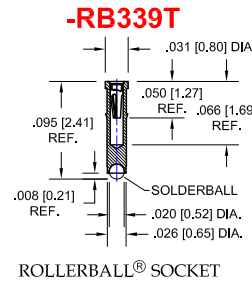
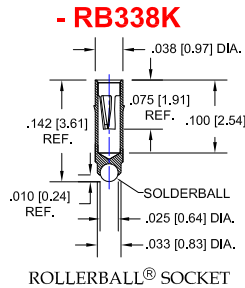
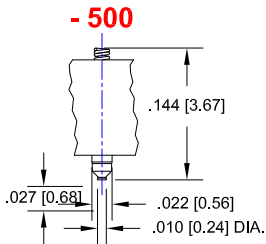
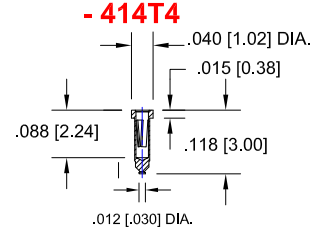
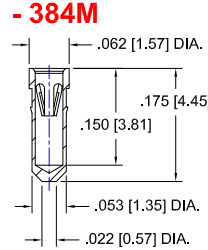
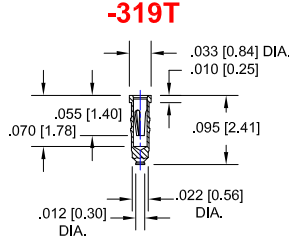
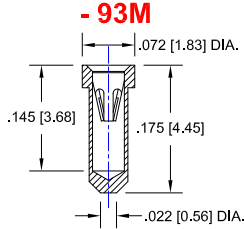
**RoHS Compliant**

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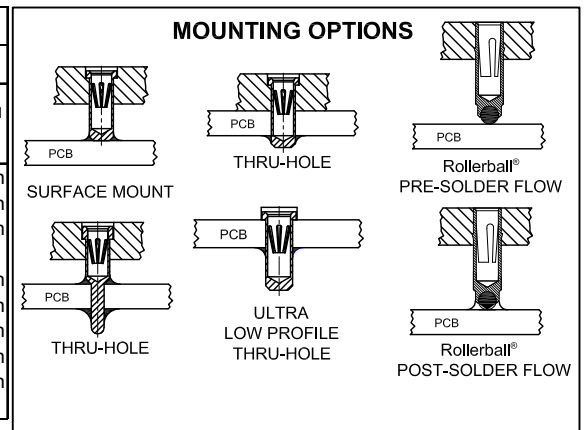


**GPIXEL INC. Continued**  
**Image Sensor Terminal Options**  
*Units: in [mm]*

**SURFACE MOUNT OPTION**



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
-400T4	Ø.012 [Ø0.30]	1.1 oz Max	0.3 oz Min	-414T4	Ø.012 [Ø0.30]	1.1 oz Max	0.3 oz Min
-01M	Ø.018 [Ø0.46]	1.6 oz Max	0.5 oz Min	-93M	Ø.018 [Ø0.46]	1.6 oz Max	0.5 oz Min
-80M	Ø.018 [Ø0.46]	1.6 oz Max	0.5 oz Min	-93M	Ø.018 [Ø0.46]	1.6 oz Max	0.5 oz Min
-491	-	-	-	-500	-	-	-
-75M	Ø.018 [Ø0.46]	1.6 oz Max	0.5 oz Min	-384M	Ø.018 [Ø0.46]	1.6 oz Max	0.5 oz Min
-347T	Ø.010 [Ø0.30]	1.0 oz Max	0.3 oz Min	-319T	Ø.010 [Ø0.46]	1.0 oz Max	0.3 oz Min
				-RB339T	Ø.010 [Ø0.30]	1.0 oz Max	0.3 oz Min
				-RB338K	Ø.018 [Ø0.46]	1.6 oz Max	0.5 oz Min
				-RB501T4	Ø.012 [Ø0.30]	1.1 oz Max	0.3 oz Min
				-RB593	-	-	-



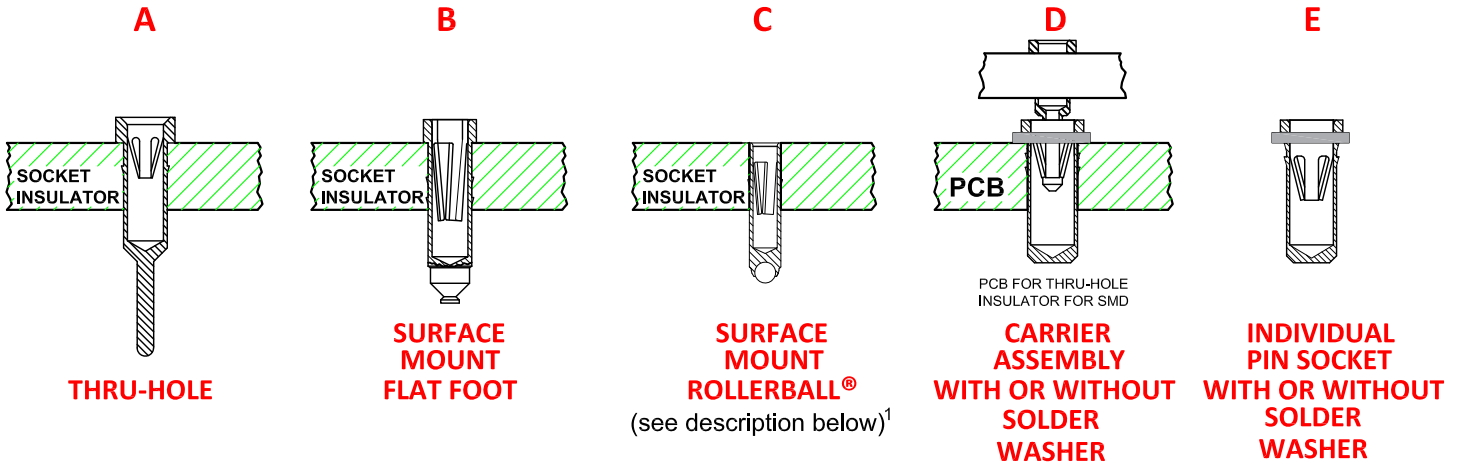
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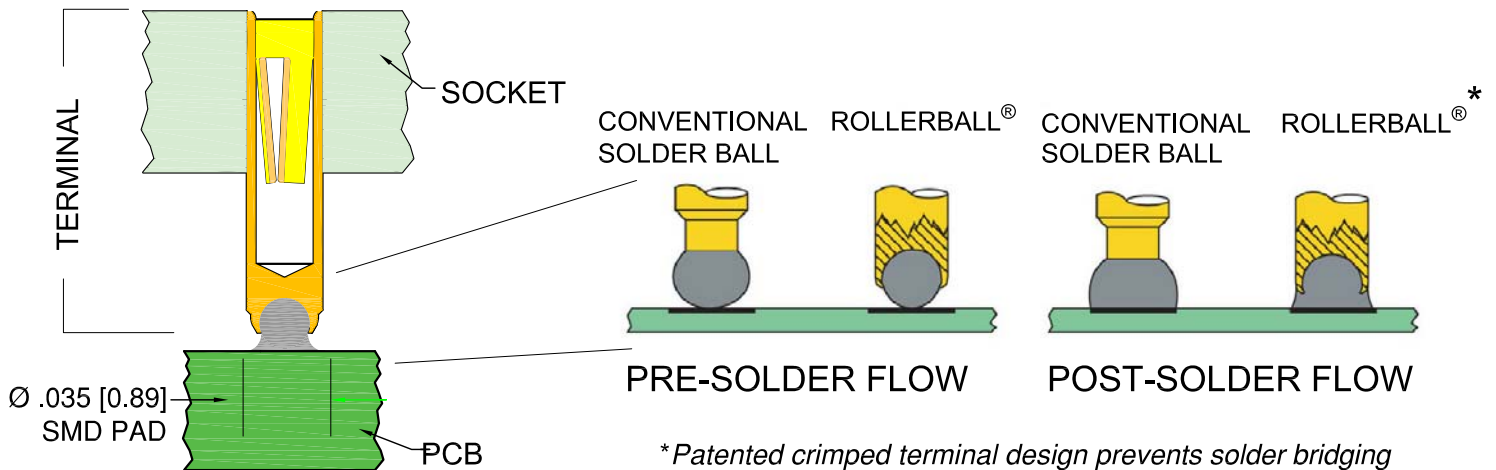
## Socket Mounting Options



<sup>1</sup>Andon's patented Rollerball® socket terminal option provides more accurate soldering, a stronger connection, and improved electrical connectivity - especially under shock and vibration - than other solder ball terminal designs. Better yet, it can enable you to avoid expensive rework and scrap - especially with larger PCBs where coplanarity is an inherent challenge.

The bottom of these terminals has a radiused hole, to prevent gas entrapment. The terminal is crimped over the solder ball beyond its hemisphere, encapsulating it - leaving just enough of the solder ball exposed to provide sufficient solder without the solder bridging common in conventional solder ball terminal designs.

With this unique design, the critical distance between the terminal and the PC board pad is typically reduced from .036"-.040" to .018"-.022". As such, the solder becomes part of the "anchor" cross-section - providing additional mechanical strength to the connection, as well as improved electrical connectivity. Because it also provides controlled dispersion of solder, this encapsulated solder ball reduces the risk of solder bridging inherent in conventional solder ball terminal designs.



**For fast, accurate placement of SIP sockets and ultra-low profile terminals**

**Phase 1:**  
Receive Carrier Assemblies designed to your pin layout.



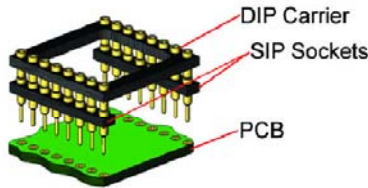
**Phase 2:**  
Place carrier assemblies onto PCB; run through your soldering process.



**Phase 3:**  
Remove carrier and plug in your device; discard carrier or send back to our factory for reloading.

## DIP

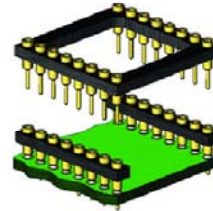
**Before Soldering**



**During Soldering**

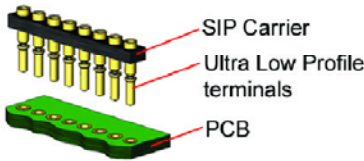


**After Soldering**

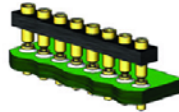


## ULTRA-LOW PROFILE SIP

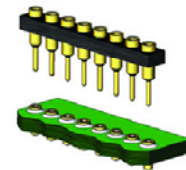
**Before Soldering**



**During Soldering**

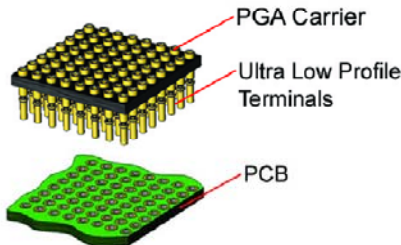


**After Soldering**

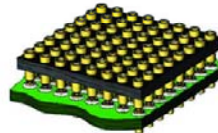


## ULTRA-LOW PROFILE PGA

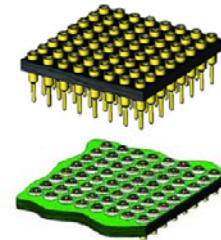
**Before Soldering**



**During Soldering**

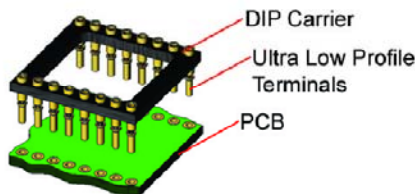


**After Soldering**

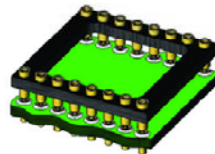


## ULTRA LOW PROFILE DIP

**Before Soldering**



**During Soldering**



**After Soldering**

