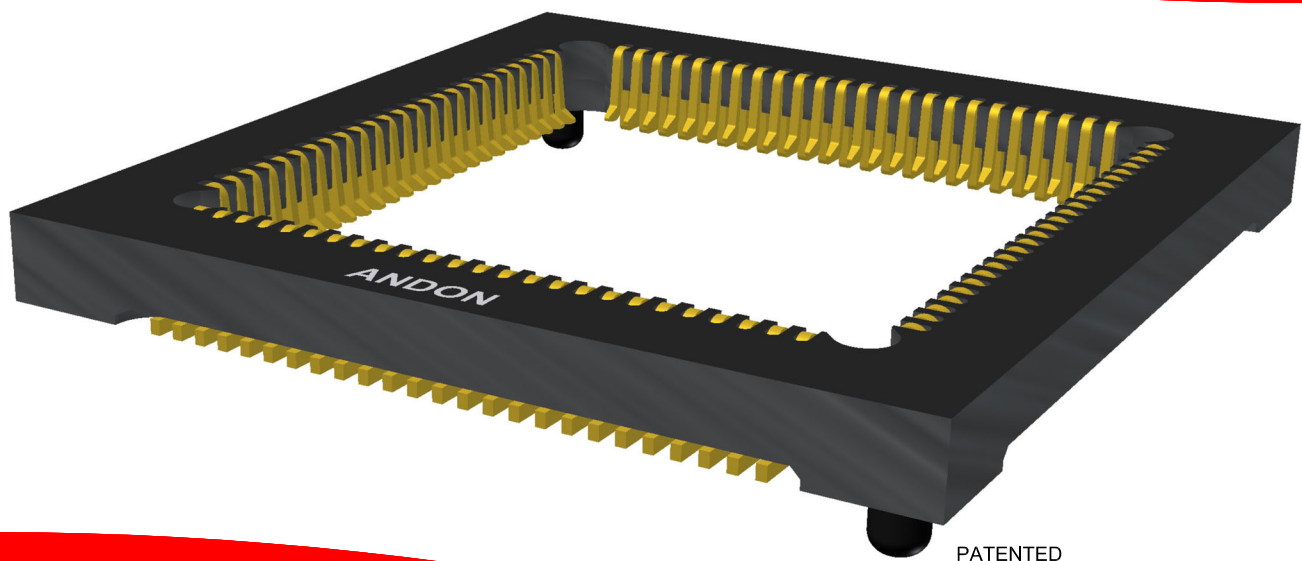




High-Reliability Image Sensor Sockets for Hamamatsu Photonics K.K.

HAMAMATSU
PHOTON IS OUR BUSINESS



Featuring Andon's Unique SenstacTM Contact

HAMAMATSU						
HAMAMATSU Model Number	Andon Part Number Replace "XXX" with Terminal Type	Terminal Type Thru-Hole Surface Mount		Pin Ø [in]	Figure Number	Page Number
G8050 series	IS229-828-XXX-R27-L14	01S	93S	.018	1	3
G8051 series	IS229-828-XXX-R27-L14	01S	93S	.018	1	3
G8052 series	IS229-828-XXX-R27-L14	01S	93S	.018	1	3
G8053 series	IS229-828-XXX-R27-L14	01S	93S	.018	1	3
G8160-265S	IS229-828-XXX-R27-L14	01S	93S	.018	1	3
G8161-512S	IS229-828-XXX-R27-L14	01S	93S	.018	1	3
G8162-256S	IS229-828-XXX-R27-L14	01S	93S	.018	1	3
G8163-512S	IS229-828-XXX-R27-L14	01S	93S	.018	1	3
G11475	IS229-820-XXX-R27-L14	01S	93S	.018	13	6
G11476	IS229-820-XXX-R27-L14	01S	93S	.018	13	6
G11477	IS229-820-XXX-R27-L14	01S	93S	.018	13	6
G11478	IS229-820-XXX-R27-L14	01S	93S	.018	13	6
G11508	IS229-820-XXX-R27-L14	01S	93S	.018	13	6
G14237-512WA	IS229-828-XXX-R27-L14	01S	93S	.018	1	3
S3901 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S3902 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S3903 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S3904 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S3921 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S3922 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S3923 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S3924 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S5930 series	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S5931 series	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S7018-1010	575-13-83-048-XXX-R27-L14	01S	93S	.018	2	3
S7019-1009	575-13-83-048-XXX-R27-L14	01S	93S	.018	2	3
S7010-0906	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S7010-0907	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S7010-1006	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S7010-1007	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S7010-0908	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S7010-1008	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S7011 series	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S7015-0908	IS229-9124-XXX-R27-L14	01S	93S	.018	5	4
S7015-1008	IS229-9124-XXX-R27-L14	01S	93S	.018	5	4
S7017-1007	IS229-2024-XXX-R27-L14	01S	93S	.018	6	4
S7017-1008	IS229-2024-XXX-R27-L14	01S	93S	.018	6	4
S7030 series	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S7031 series	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S7033 series	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S7034 series	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S7170-0909	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S7171-0909	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S7847-1007	IS229-2024-XXX-R27-L14	01S	93S	.018	6	4
S7847-1008	IS229-2024-XXX-R27-L14	01S	93S	.018	6	4
S7986-01	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S7987-01	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S8377 series	IS229-308-XXX-R27-L14	01S	93S	.018	9	4
S8378 series	IS229-308-XXX-R27-L14	01S	93S	.018	9	4
S8380 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S8381 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S9226 series	IS229-308-XXX-R27-L14	01S	93S	.018	9	4
S9227 series	IS229-308-XXX-R27-L14	01S	93S	.018	9	4

HAMAMATSU						
HAMAMATSU Model Number	Andon Part Number Replace "XXX" with Terminal Type	Terminal Type		Pin Ø [in]	Figure Number	Page Number
		Thru-Hole	Surface Mount			
S9970-0906	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S9970-1006	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S9970-1007	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S9970-1008	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S9971-0906	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S9971-1006	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S9971-1007	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S9971-1008	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S9972-1007	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S9972-1008	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S9973-1007	IS229-624-XXX-R27-L14	01S	93S	.018	4	3
S9973-1008	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S10111-128Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10111-256Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10111-512Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10112-128Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10112-256Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10112-512Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10113-256Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10113-512Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10113-1024Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10114-256Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10114-512Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10114-1024Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10121 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10122 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10123 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10124 series	IS229-422-XXX-R27-L14	01S	93S	.018	8	4
S10140 series	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S10141 series	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S10420-01 series	IS229-4124-XXX-R27-L14	01S	93S	.018	16	7
S11071 series	IS229-4124-XXX-R27-L14	01S	93S	.018	16	7
S11151-2048	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S11155-2048-02	IS229-4124-XXX-R27-L14	01S	93S	.018	16	7
S11156-2048-02	IS229-4124-XXX-R27-L14	01S	93S	.018	16	7
S11490	IS232-354-XXX-R27-L14	01S	93S	.018	17	7
S11491	IS232-354-XXX-R27-L14	01S	93S	.018	17	7
S11511	IS229-528-XXX-R27-L14	01S	93S	.018	14	6
S11638	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S11639	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S11850-1106	IS229-528-XXX-R27-L14	01S	93S	.018	14	6
S11851-1106	IS229-528-XXX-R27-L14	01S	93S	.018	14	6
S12101	IS229-2040-XXX-R27-L14	01S	93S	.018	15	6
S12706	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S13101	687-88A-SM-G10-L14-1	-	-	-	11	5
S13102	687-48A-SM-G10-L14-1	-	-	-	12	5
S13240 series	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S13241 series	IS229-924-XXX-R27-L14	01S	93S	.018	7	4
S13255-2048-02	IS229-528-XXX-R27-L14	01S	93S	.018	14	6
S13256-2048-02	IS229-528-XXX-R27-L14	01S	93S	.018	14	6
S13496	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S14650 series	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S14651-2048	IS229-528-XXX-R27-L14	01S	93S	.018	14	6
S14660 series	IS229-424-XXX-R27-L14	01S	93S	.018	3	3
S14661-2048	IS229-528-XXX-R27-L14	01S	93S	.018	14	6
S14739-20	620-16A-SM-G10-L14-1	-	-	-	18	7
S15909-1024Q	IS229-422-XXX-R27-L14	01S	93S	.018	8	4

HAMAMATSU *Continued*

Image Sensor Socket Footprints

Units: in [mm]

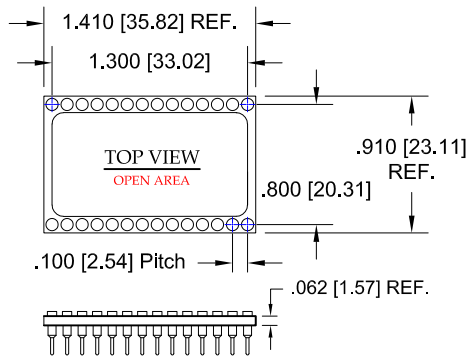


Fig. 1 28 Pins
Thru-Hole: IS229-828-01S-R27-L14
Surface Mount: IS229-828-93S-R27-L14

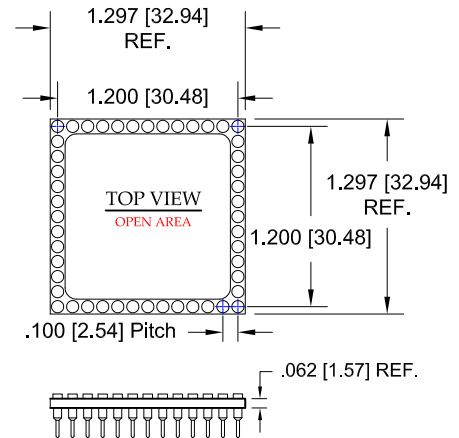


Fig. 2 48 Pins
Thru-Hole: 575-13-83-048-01S-R27-L14
Surface Mount: 575-13-83-048-93S-R27-L14

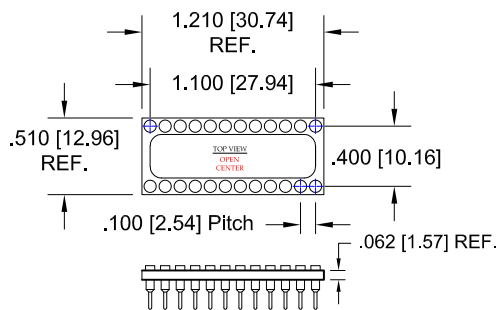


Fig. 3 24 Pins
Thru-Hole: IS229-424-01S-R27-L14
Surface Mount: IS229-424-93S-R27-L14

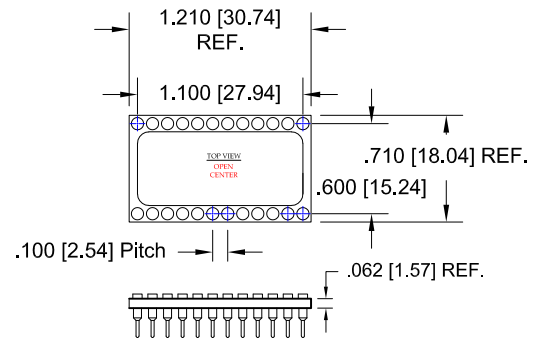


Fig. 4 24 Pins
Thru-Hole: IS229-624-01S-R27-L14
Surface Mount: IS229-624-93S-R27-L14

HAMAMATSU *Continued*

Image Sensor Socket Footprints

Units: in [mm]

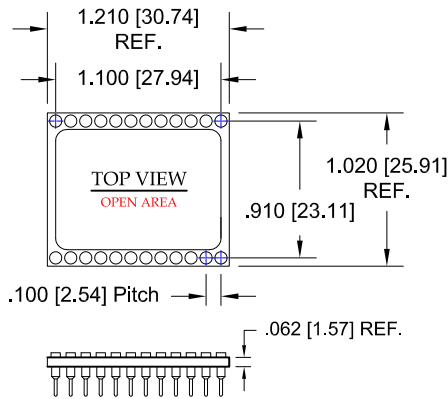


Fig. 5 24 Pins
Thru-Hole: IS229-9124-01S-R27-L14
Surface Mount: IS229-9124-93S-R27-L14

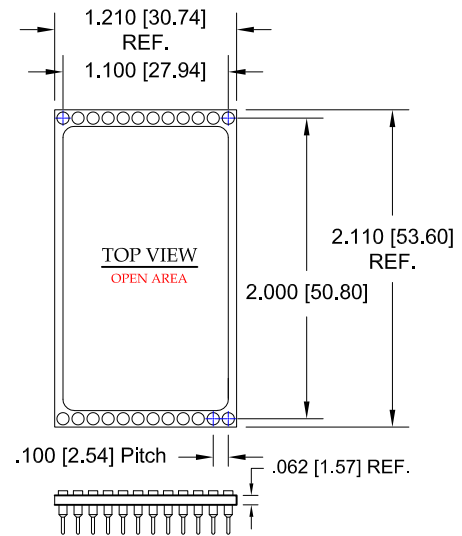


Fig. 6 24 Pins
Thru-Hole: IS229-2024-01S-R27-L14
Surface Mount: IS229-2024-93S-R27-L14

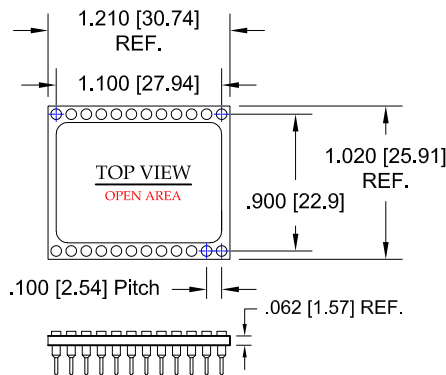


Fig. 7 24 Pins
Thru-Hole: IS229-924-01S-R27-L14
Surface Mount: IS229-924-93S-R27-L14

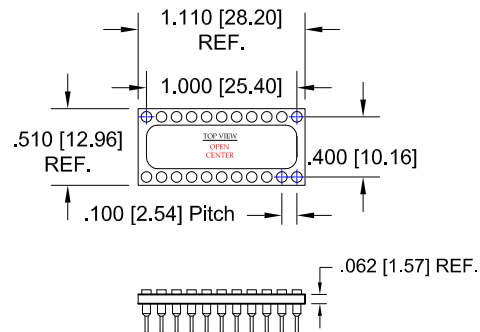


Fig. 8 22 Pins
Thru-Hole: IS229-422-01S-R27-L14
Surface Mount: IS229-422-93S-R27-L14

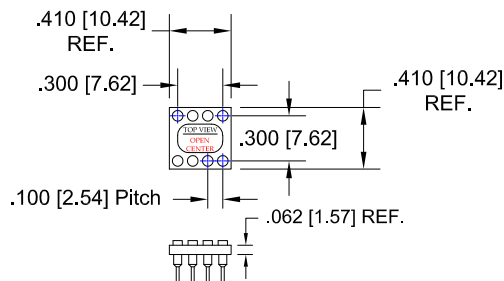


Fig. 9 8 Pins
Thru-Hole: IS229-308-01S-R27-L14
Surface Mount: IS229-308-93S-R27-L14

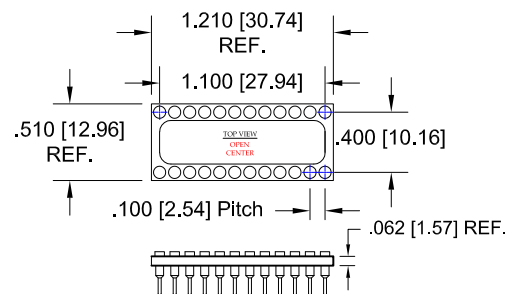
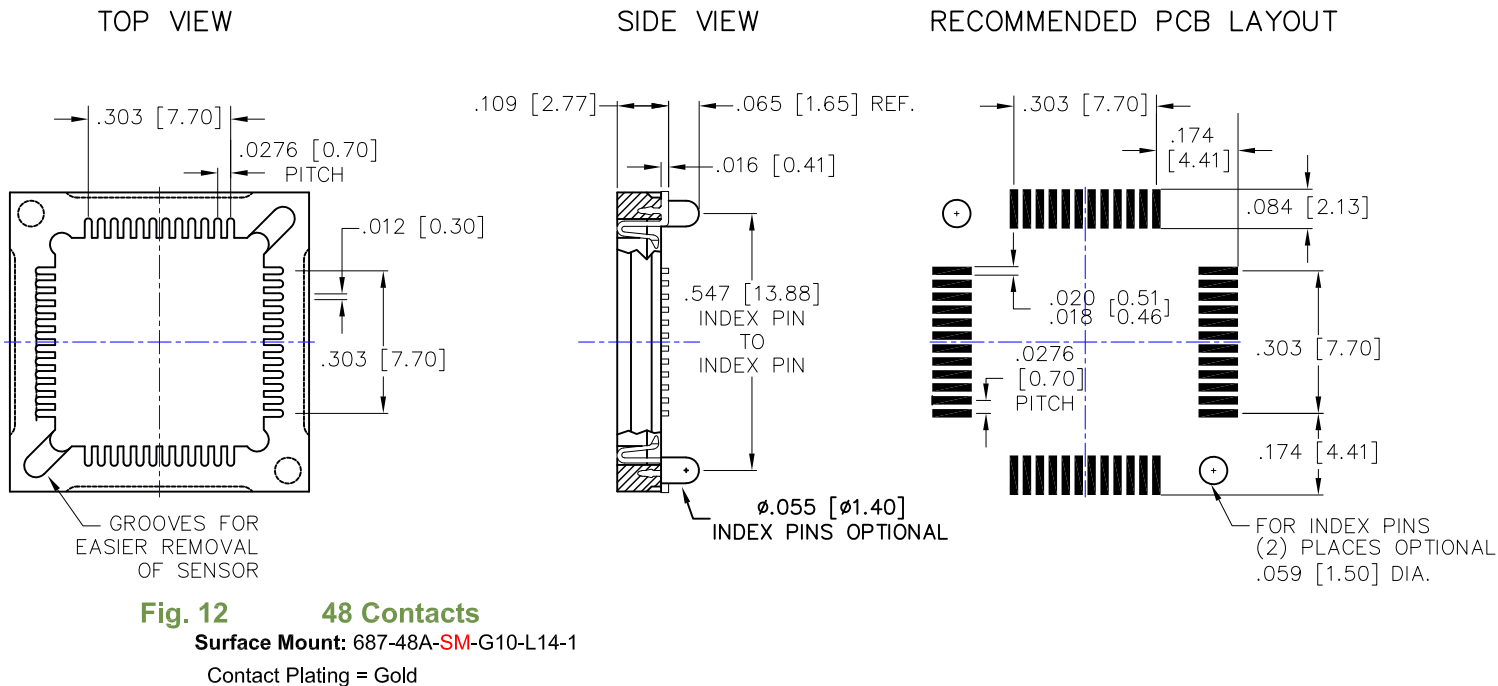
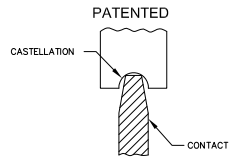
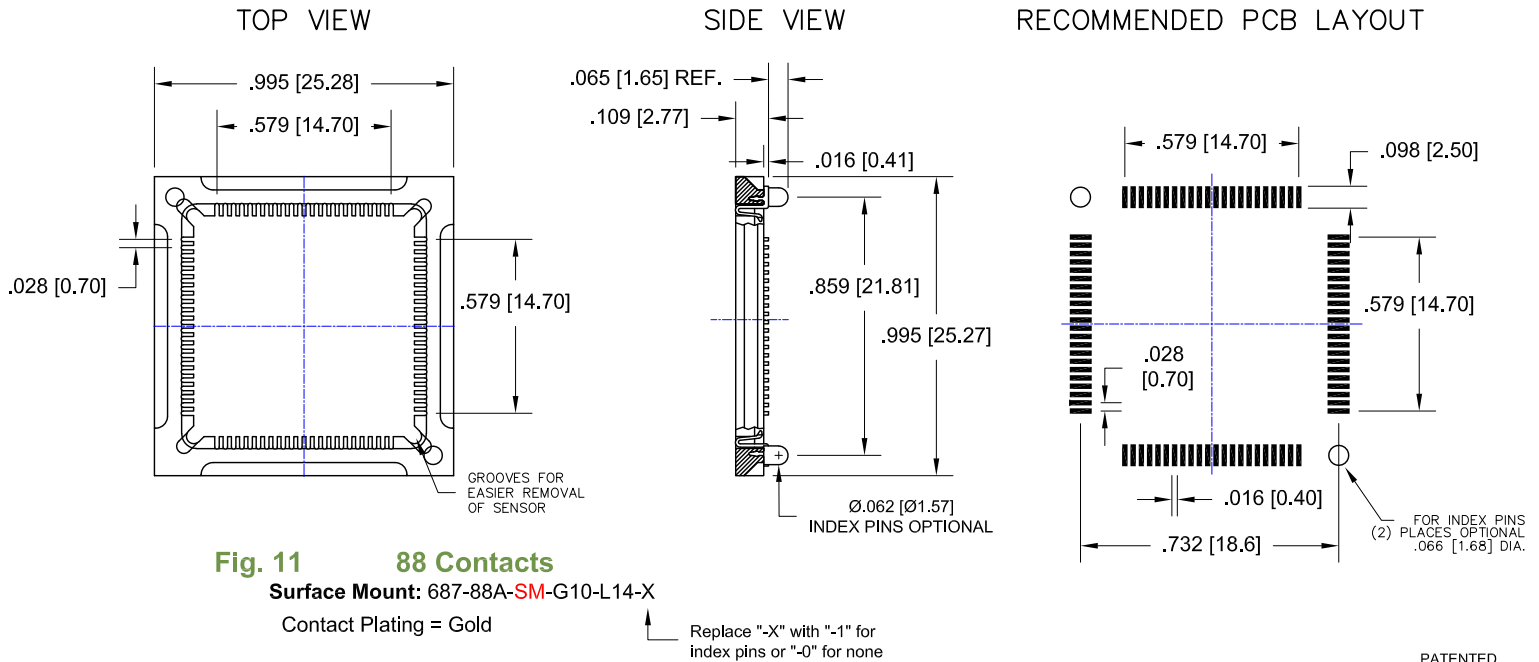


Fig. 10 24 Pins
Thru-Hole: IS229-424-01S-R27-L14
Surface Mount: IS229-424-93S-R27-L14

HAMAMATSU *Continued*

Image Sensor Socket Footprints

Units: in [mm]



HAMAMATSU *Continued*

Image Sensor Socket Footprints

Units: in [mm]

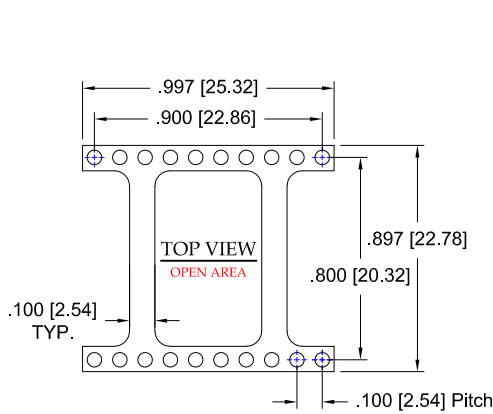


Fig. 13 20 Pins
Thru-Hole: IS229-820-01S-R27-L14-A
Surface Mount: IS229-820-93S-R27-L14-A

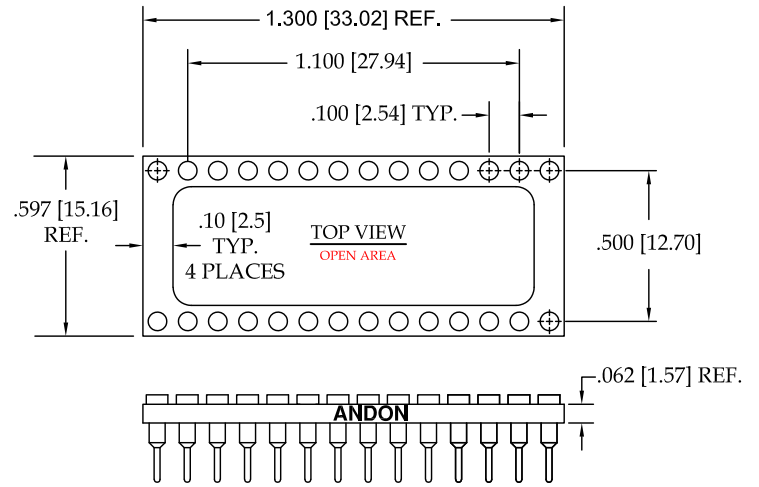


Fig. 14 28 Pins
Thru-Hole: IS229-528-01S-R27-L14
Surface Mount: IS229-528-93S-R27-L14

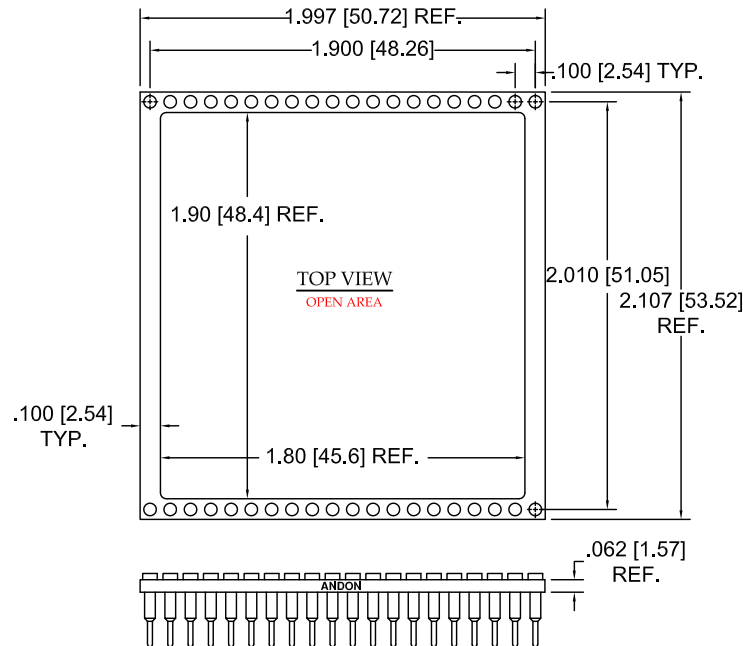


Fig. 15 40 Pins
Thru-Hole: IS229-2040-01S-R27-L14
Surface Mount: IS229-2040-93S-R27-L14

HAMAMATSU *Continued*

Image Sensor Socket Footprints

Units: in [mm]

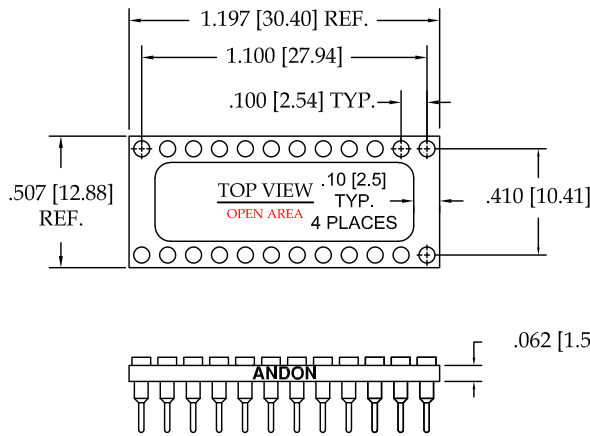


Fig. 16 24 Pins
Thru-Hole: IS229-4124-01S-R27-L14
Surface Mount: IS229-4124-93S-R27-L14

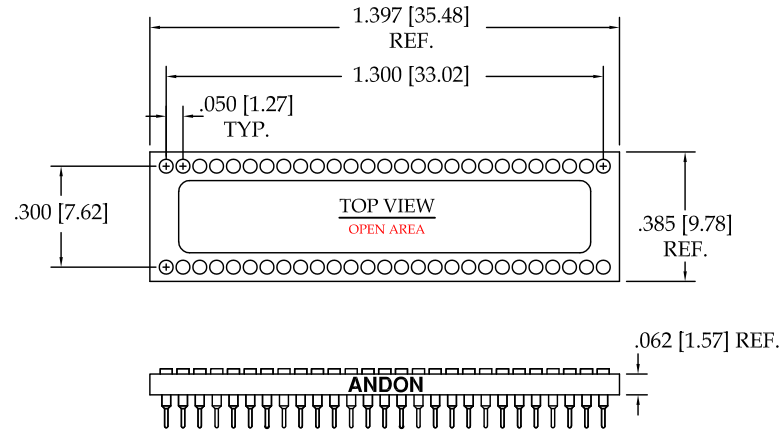


Fig. 17 54 Pins
Thru-Hole: IS232-354-01S-R27-L14
Surface Mount: IS232-354-93S-R27-L14

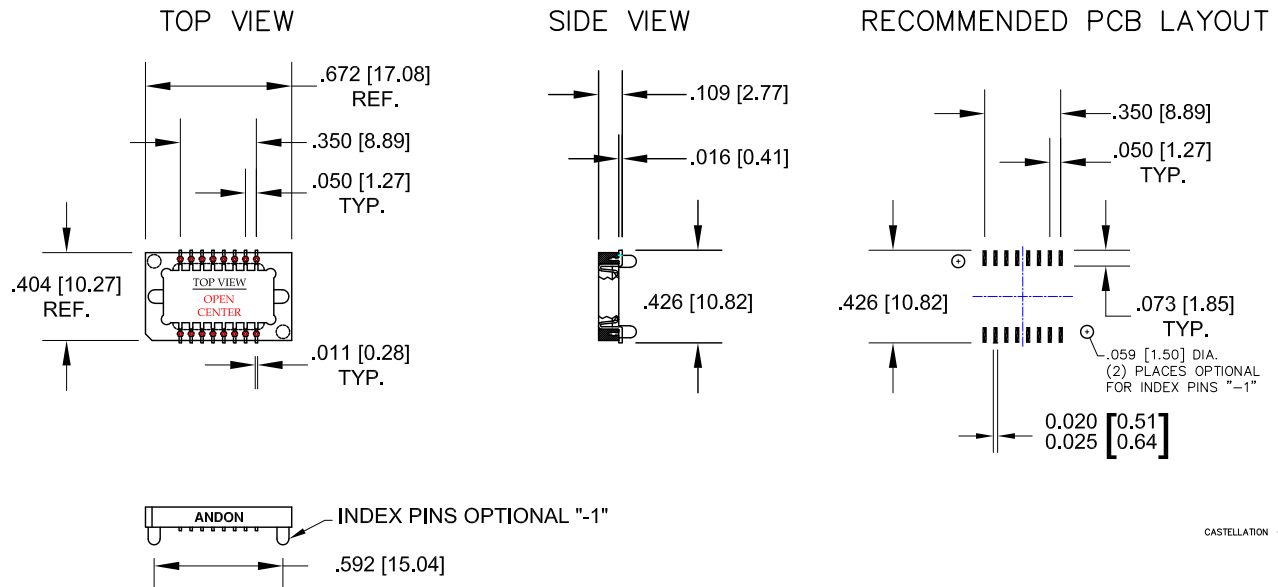
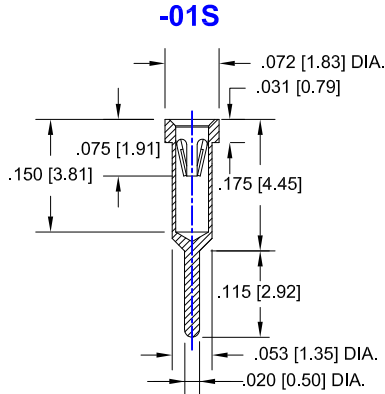


Fig. 18 16 Contacts
Surface Mount: 620-16A-SM-G10-L14-X
 Contact Plating = Gold

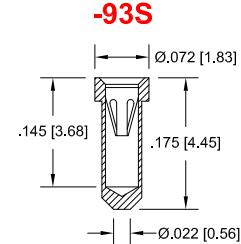
Replace "-X" with "-1" for index pins or "-0" for none

HAMAMATSU *Continued* Image Sensor Terminal Options Units: in [mm]

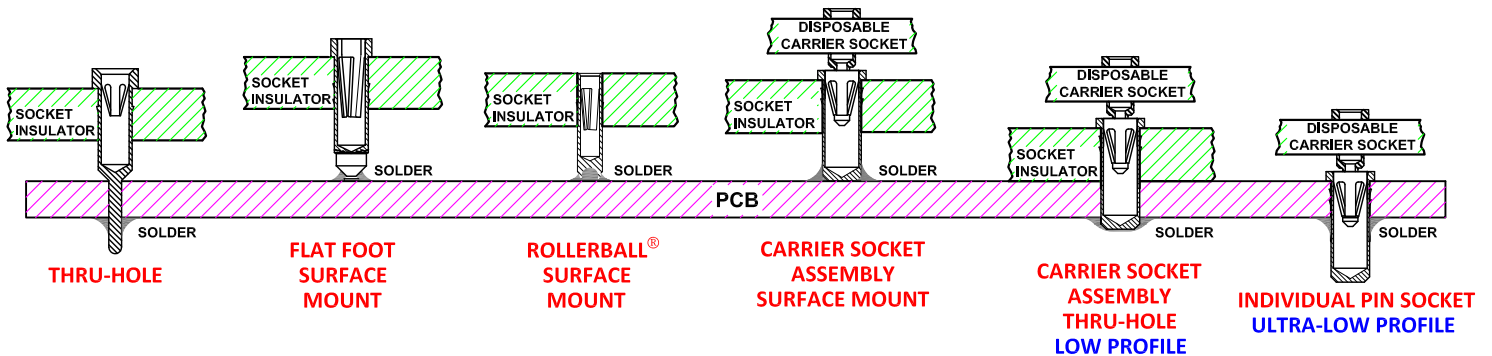
THRU HOLE OPTION



SURFACE MOUNT OPTION



Socket & Terminal Options



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

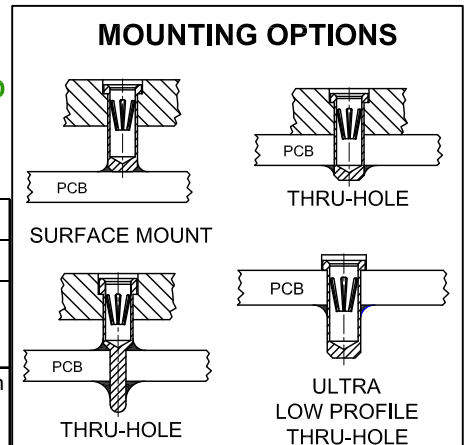
Material:

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

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]	9.00 oz Max.	2.00 oz Min	-93S	Ø.018 [Ø0.46]	9.00 oz Max.	2.00 oz Min

MOUNTING OPTIONS



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

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



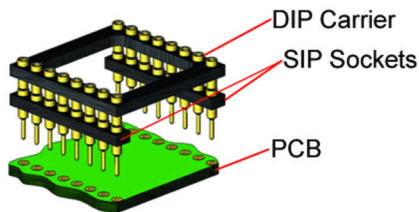
Phase 2:
Place carrier assemblies onto PCB;
run through your soldering process.



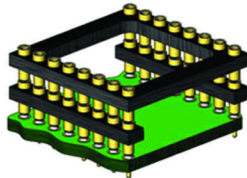
Phase 3:
Remove carrier and plug in your device;
discard carrier.

DIP

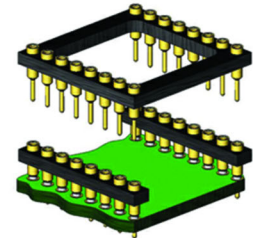
Before Soldering



During Soldering

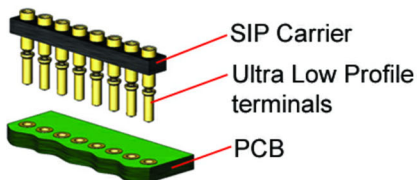


After Soldering

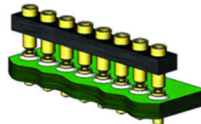


ULTRA-LOW PROFILE SIP

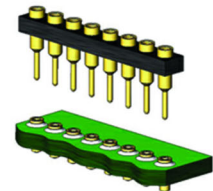
Before Soldering



During Soldering

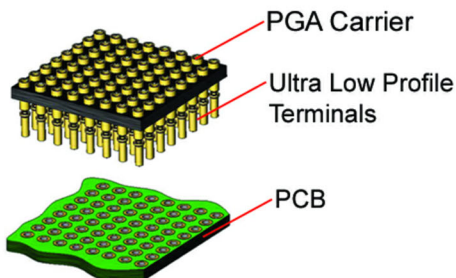


After Soldering

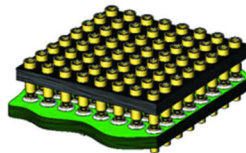


ULTRA-LOW PROFILE PGA

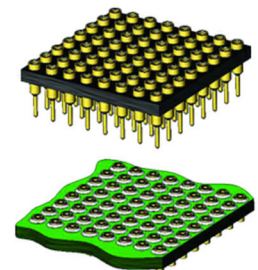
Before Soldering



During Soldering

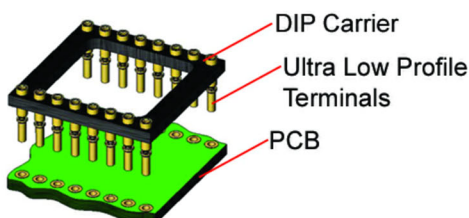


After Soldering

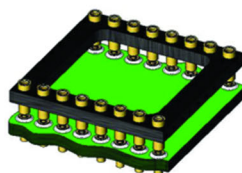


ULTRA LOW PROFILE DIP

Before Soldering



During Soldering



After Soldering

