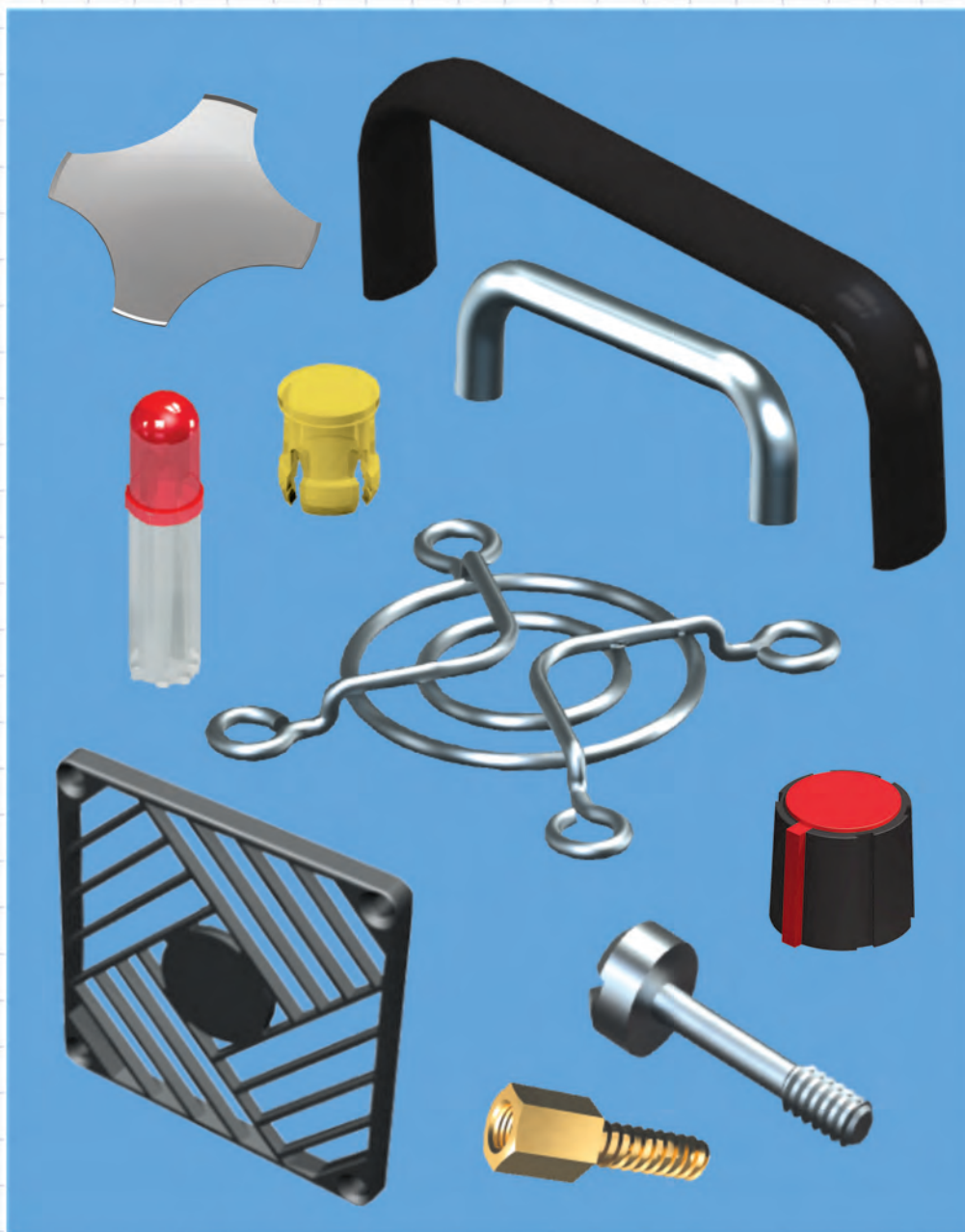




SECTION 5 CONTENTS

COMPUTER HARDWARE

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HANDLES, INSTRUMENTATION

KEY PAD DOME SWITCHES

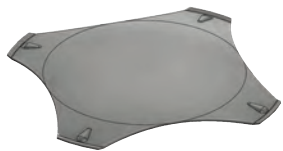
KNOBS, INSTRUMENTATION

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METAL "KEY-PAD" DOME SWITCHES



- Exceptional tactile feel for single or double-sided printed circuit boards
- Ideal for keypad arrays
- "Key-Pad" Domes float on PCB, no soldering recommended
- Supplied on tape and reel compatible with vacuum and mechanical pick and place systems
- Adhesive backed spacer material for creating custom "Key-Pad" arrays is also available
- Provides the proper spacing between the circuit board, the dome and the device graphic layer



Specifications:

Material: Stainless Steel, Nickel Plated.

Gold plating available.

Operating Temperature: -40°F to 220°F (-40°C to 105°C)

Storage Temperature: -67°F to 257°F (-55°C to 125°C)

Electrical:

Contact Resistance: less than 100 mOhm

Switching Voltage: 0.1 to 100VDC

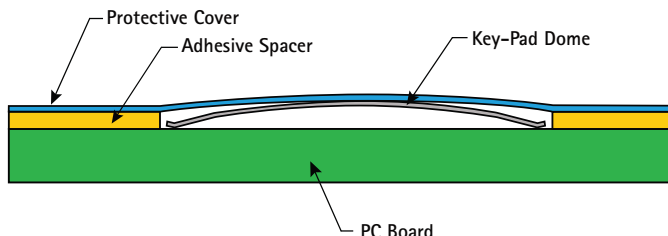
Switching Current: 5 μ Amp to 100 mAmp DC

Switching Capacity: 1 Watt



"Key-Pad" Domes are ideal for Keypad arrays that require long life or a sealed interface. These snap action switches provide positive feedback with an audible and tactile click. "Key-Pad" domes are made from nickel plated stainless steel which provides a very reliable user interface (over one million cycles). "Key-Pad" domes can be placed directly to a PCB which will save on assembly cost and increase reliability. Available on tape and reel for automated pick and place assembly applications, as well as packed stacked in tubes. For pack stacked in tubes, the contour of the dome keeps an air pocket in between each dome. The air pocket allows only one dome to be picked off the stack eliminating double stacked domes.

The "Key-Pad" dome is designed to be placed on the PCB, not soldered. The domes are held in place by using a "Key-Pad" adhesive spacer (Cat. No. 5200) which requires cut outs to be added in the proper locations. If the top sealing surface has an adhesive bottom side, it will help to keep the dome in the proper location (optional).



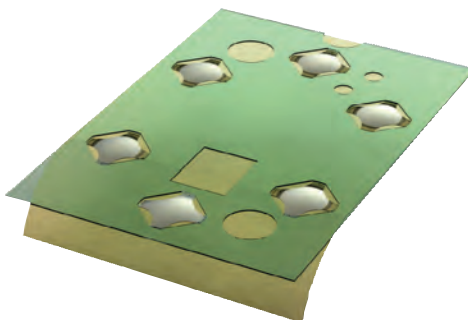
The low profile of the dome is ideal for thin, lightweight applications or applications that need to be sealed or easily cleaned. The domes can be activated from finger pressure thru a thin flexible membrane that can be sealed against the product chassis so cleaning fluids, dust or weather will not damage the circuitry.

If the device has a thicker or sculpted exterior package, the dome can be activated with an actuator. The actuator will give the "Key-Pad" dome a more conventional push button feel.

A "Key-Pad" Dome is available for almost any application with trip forces ranging from 8 oz. to 14 oz. and dome diameters from 8.4mm to 12.2mm. Trip forces are consistent from switch to switch per batch. This insures that a switch array will have a consistent feel from switch to switch. "Key-Pad" domes have a large sweet spot which allows the dome to be easily activated even though it was pushed off center. Gold plated domes are available upon request.

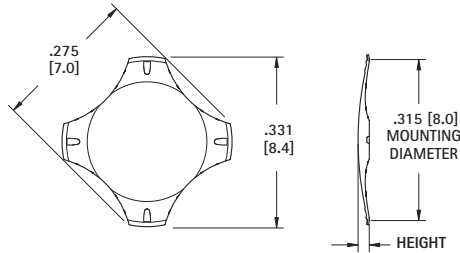


**COMPLETE
DOME ASSEMBLIES
AVAILABLE**



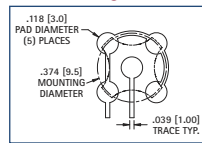
For quote, please forward
dome sketch layout to:
sales@keyelco.com

MINI SERIES KEY-PAD DOME SWITCHES - .331 (8.4) DIA



SUPPLIED ON TAPE AND REEL

Mounting Detail

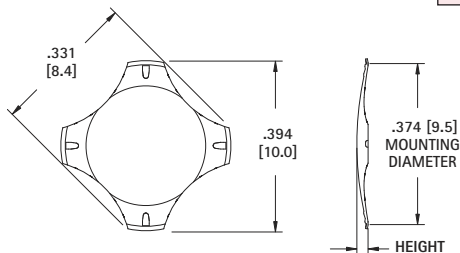


* Key-Pad Domes are designed to be placed on board, not soldered

TAPE & REEL (5000 PER)	MINI SERIES - .330 (8.40) DIAMETER			
CAT. NO.	HEIGHT $\pm .004$ (± 0.10)	TRIP FORCE	REBOUND FORCE	CLICK RATIO
5133TR	.018 (0.45)	7.8 oz (220g)	3.2 oz (90g)	40%-70%
5134TR	.020 (0.50)	9.9 oz (280g)	3.2 oz (90g)	50%-80%
5135TR	.022 (0.55)	12.0 oz (340g)	4.6 oz (130g)	50%-80%
5136TR	.022 (0.55)	14.1 oz (400g)	5.3 oz (150g)	50%-80%

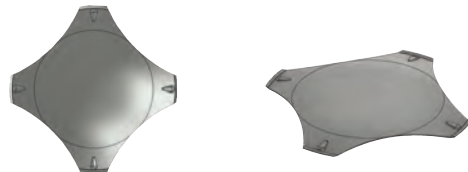
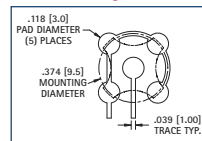
Click Ratio: (Trip Force - Rebound Force)/Trip Force. Choose a higher click ratio for switches that will click or snap when activated. Use lower click ratios for a more conventional feeling switch.

COMPACT SERIES KEY-PAD DOME SWITCHES - .394 (10.0) DIA



SUPPLIED ON TAPE AND REEL

Mounting Detail

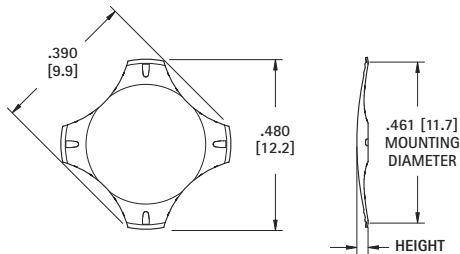


* Key-Pad Domes are designed to be placed on board, not soldered

TAPE & REEL (4000 PER)	COMPACT SERIES - .394 (10.00) DIAMETER			
CAT. NO.	HEIGHT $\pm .004$ (± 0.10)	TRIP FORCE	REBOUND FORCE	CLICK RATIO
5153TR	.030 (0.75)	7.8 oz (220g)	3.2 oz (90g)	40%-70%
5154TR	.030 (0.75)	9.9 oz (280g)	3.2 oz (90g)	50%-80%
5155TR	.031 (0.80)	12.0 oz (340g)	3.5 oz (100g)	60%-80%
5156TR	.031 (0.80)	14.1 oz (400g)	3.5 oz (100g)	60%-85%

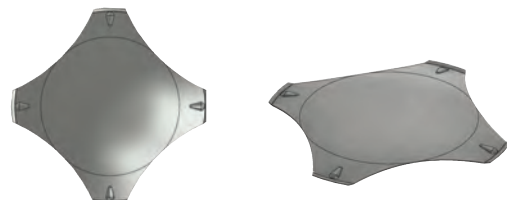
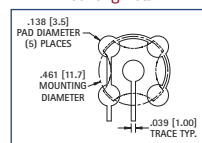
Click Ratio: (Trip Force - Rebound Force)/Trip Force. Choose a higher click ratio for switches that will click or snap when activated. Use lower click ratios for a more conventional feeling switch.

MAXI SERIES - .480 (12.20) DIA



SUPPLIED ON TAPE AND REEL

Mounting Detail



* Key-Pad Domes are designed to be placed on board, not soldered

TAPE & REEL (4000 PER)	MAXI SERIES - .480 (12.20) DIAMETER			
CAT. NO.	HEIGHT $\pm .004$ (± 0.10)	TRIP FORCE	REBOUND FORCE	CLICK RATIO
5173TR	.026 (0.65)	7.8 oz (220g)	3.0 oz (85g)	40%-70%
5174TR	.030 (0.75)	9.9 oz (280g)	3.2 oz (90g)	50%-80%
5175TR	.030 (0.75)	12.0 oz (340g)	3.5 oz (100g)	50%-80%
5176TR	.031 (0.80)	14.8 oz (420g)	4.2 oz (120g)	50%-80%

Click Ratio: (Trip Force - Rebound Force)/Trip Force. Choose a higher click ratio for switches that will click or snap.

ADHESIVE SPACER



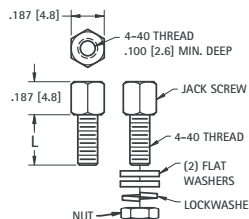
ADHESIVE SPACER - SINGLE SIDED			
CAT. NO.	WIDTH	LENGTH	THICKNESS
5200	36.00 (970)	24.00 (610)	.009 (235mm)

JACK SCREWS

• Equivalent to AMP, CANNON & TRW Jack Screws • "D" subminiature connector mounting screw • Custom lengths available • Hardware supplied unassembled and in bulk

SPECIFICATIONS: **YELLOW:** Steel, Zinc Plate and Yellow Chromate; **CLEAR:** Steel, Zinc Plate and Clear Chromate; **STAINLESS:** Stainless Steel

STANDARD JACK SCREWS

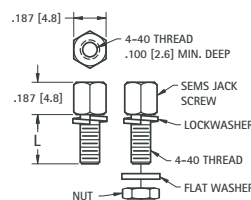


JACK ONLY			L LENGTH	JACK WITH HARDWARE*		
YELLOW CAT. NO.	CLEAR CAT. NO.	STAINLESS CAT. NO.		YELLOW CAT. NO.	CLEAR CAT. NO.	STAINLESS CAT. NO.
7228	7228-5	7248	.250 (6.4)	7229	7229-5	7249
7230	7230-5	7250	.312 (7.9)	7231	7231-5	7251
7241	7241-5	7252	.375 (9.5)	7242	7242-5	7253
7243	7243-5	7254	.500 (12.7)	7244	7244-5	7255
7232	7232-5	7256	.625 (15.8)	7233	7233-5	7257

*Hardware supplied unassembled in bulk

SEMS JACK SCREWS

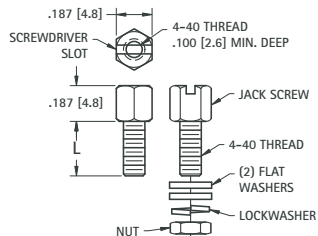
• Captivated helical spring lockwasher, simplifies use



SEMS JACK ONLY		L LENGTH	SEMS JACK WITH HARDWARE*	
CLEAR CAT. NO.	STAINLESS CAT. NO.		CLEAR CAT. NO.	STAINLESS CAT. NO.
7235	7236	.285 (7.3)	7237	7238
7237	7238	.347 (8.8)	7239	7240
7239	7240	.660 (16.8)		

*Hardware supplied unassembled in bulk

SLOTTED JACK SCREWS



• Slot provides ability to install jack with a screwdriver.

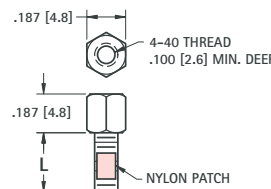
JACK ONLY			L LENGTH	JACK WITH HARDWARE*	
YELLOW CAT. NO.	CLEAR CAT. NO.	STAINLESS CAT. NO.		YELLOW CAT. NO.	CLEAR CAT. NO.
7270	7275	7290	.250 (6.3)	7271	7276
7271	7276	7291	.312 (7.9)	7272	7277
7272	7277	7292	.375 (9.5)	7273	7278
7273	7278	7293	.500 (12.7)	7274	7279
7274	7279	7294	.625 (15.8)		

*Hardware supplied unassembled in bulk

JACK SCREWS WITH NYLON PATCH



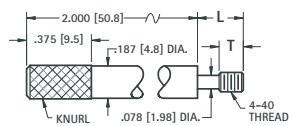
• Nylon patch holds jack firmly in vibration applications.



JACK WITH NYLON PATCH			
YELLOW CAT. NO.	CLEAR CAT. NO.	STAINLESS CAT. NO.	L LENGTH
7260	7261	7262	.250 (6.4)
7263	7264	7265	.312 (7.9)
7266	7267	7268	.375 (9.5)

TURNABLE JACK SCREWS

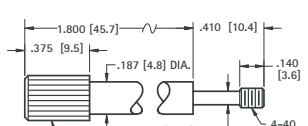
DIRECT ACCESS



MATERIAL: Steel, Black Oxide

WITHOUT SLOT CAT. NO.	WITH SLOT CAT. NO.	T DIM.	L DIM.
2064	2065	.125 (3.2)	.250 (6.4)
2066	2067	.250 (6.4)	.437 (11.1)

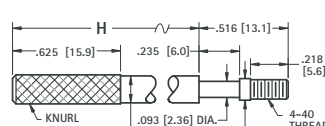
STRAIGHT KNURL



MATERIAL: Steel, Zinc Plate & Clear Chromate

WITHOUT SLOT CAT. NO.	WITH SLOT CAT. NO.
2072	2073

SLIM LINE



MATERIAL: Steel, Nickel Plate

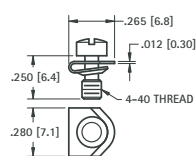
WITHOUT SLOT CAT. NO.	WITH SLOT CAT. NO.	H DIM.
2068	2069	1.250 (31.8)
2070	2071	1.750 (44.5)

PANEL MOUNTING HARDWARE

"U" CLIP



Supplied Unassembled



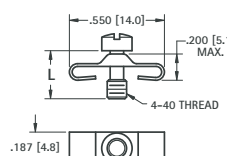
MATERIAL:
Clip & Screw: Steel, Zinc Plate & Yellow Chromate

CAT. NO. 2062

"BOW TIE" RETAINING CLIP



Supplied Unassembled



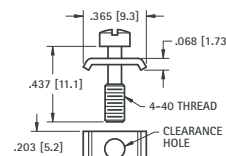
MATERIAL:
Clip & Screw: Steel, Zinc Plate & Yellow Chromate

CAT. NO.	L
2060	.250 (6.4)
2061	.281 (7.1)

SADDLE WASHER



Supplied Unassembled

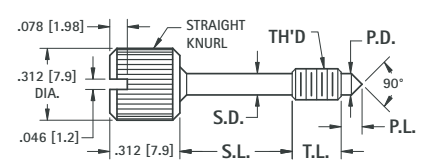
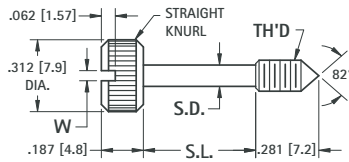


MATERIAL:
Clip & Screw: Steel, Zinc Plate & Yellow Chromate

CAT. NO. 2063

CAPTIVE PANEL SCREWS

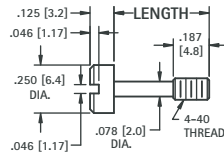
MATERIAL: Stainless Steel per ASTM-A581/A-582



CAT. NO.	THREAD	S.D. ± .005 (.13)	S.L. ± .010 (.25)	W + .015 (+.38) - .000
8700	4-40	.078 (2.0)	.375 (9.5)	.036 (.91)
8701	4-40	.078 (2.0)	.500 (12.7)	.036 (.91)
8702	4-40	.078 (2.0)	.625 (15.9)	.036 (.91)
8703	6-32	.095 (2.4)	.375 (9.5)	.045 (1.14)
8704	6-32	.095 (2.4)	.500 (12.7)	.045 (1.14)
8705	6-32	.095 (2.4)	.625 (15.9)	.045 (1.14)

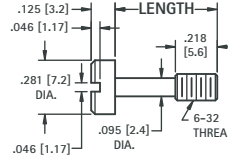
CAT. NO.	THREAD	T.L. ± .015 (.38)	S.D. ± .005 (.13)	S.L. ± .010 (.25)	P.D. + .000, -.016 (-.40)	P.L. ± .015 (.38)
8706	4-40	.125 (3.2)	.078 (2.0)	.171 (4.3)	.078 (2.0)	.078 (2.0)
8707	4-40	.125 (3.2)	.078 (2.0)	.296 (7.5)	.078 (2.0)	.078 (2.0)
8708	4-40	.125 (3.2)	.078 (2.0)	.421 (10.7)	.078 (2.0)	.078 (2.0)
8709	6-32	.218 (5.5)	.095 (2.4)	.187 (4.7)	.095 (2.4)	.093 (2.36)
8710	6-32	.218 (5.5)	.095 (2.4)	.312 (7.9)	.095 (2.4)	.093 (2.36)
8711	6-32	.218 (5.5)	.095 (2.4)	.437 (11.1)	.095 (2.4)	.093 (2.36)

4-40



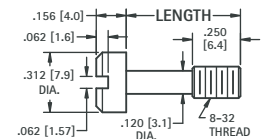
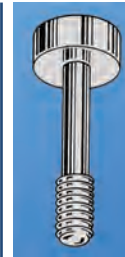
CAT. NO.	LENGTH
2413	.469 (11.9)
2414	.531 (13.4)

6-32



CAT. NO.	LENGTH
2415	.531 (13.5)
2416	.593 (15.1)
2417	.656 (16.7)

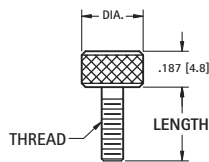
8-32



CAT. NO.	LENGTH
2418	.656 (16.7)
2419	.718 (18.2)
2420	.781 (19.8)

THUMB SCREWS

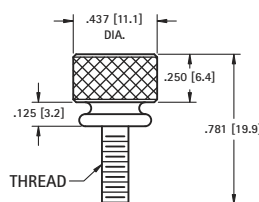
STAINLESS



MATERIAL: Stainless Steel

CAT. NO.	LENGTH	THREAD	DIA.
2400	.312 (7.9)	4-40	.312 (7.9)
2401	.375 (9.5)		
2402	.437 (11.1)		
2403	.500 (12.7)		
2404	.312 (7.9)	6-32	.312 (7.9)
2405	.375 (9.5)		
2406	.437 (11.1)		
2407	.500 (12.7)		
2408	.375 (9.5)	8-32	.375 (9.5)
2409	.437 (11.1)		
2410	.500 (12.7)		

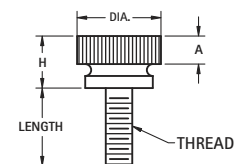
BRASS



MATERIAL: Brass, Nickel Plate

CAT. NO.	THREAD
1708	6-32
1709	8-32
1710	10-32

NYLON



MATERIAL: Nylon 6/6, UL Rated 94V-2

CAT. NO.	LENGTH	THREAD	DIA.	H	A
2500	.250 (6.4)	4-40	.300 (7.6)	.280 (7.1)	.125 (3.2)
2501	.375 (9.5)				
2502	.500 (12.7)				
2503	.250 (6.4)	6-32	.360 (9.1)	.275 (7.0)	.125 (3.2)
2504	.375 (9.5)				
2505	.500 (12.7)				

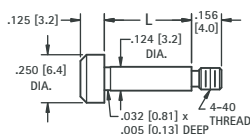


PRECISION GROUND SHOULDER SCREWS

Shoulder ground to $+0.000/-0.001$ Dia, $+0.002/-0.000$ Length. **Material:** Stainless Steel, ASTM A581/A582



4-40



SLOTTED

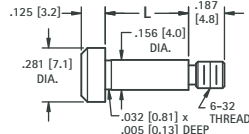


SOCKET

CAT. NO.	LENGTH	CAT. NO.
2421	.125 (3.2)	2441
2422	.250 (6.4)	2442
2423	.375 (9.5)	2443
2424	.500 (12.7)	2444



6-32



SLOTTED

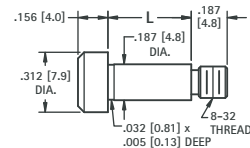


SOCKET

CAT. NO.	LENGTH	CAT. NO.
2425	.125 (3.2)	2445
2426	.250 (6.4)	2446
2427	.375 (9.5)	2447
2428	.500 (12.7)	2448



8-32



SLOTTED

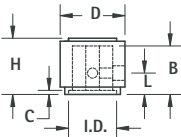
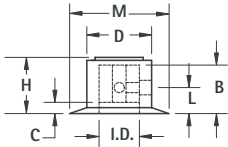
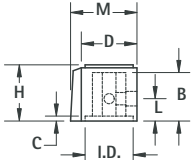
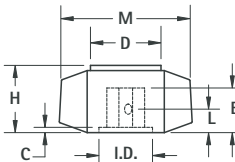


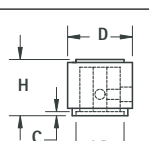
SOCKET

CAT. NO.	LENGTH	CAT. NO.
2431	.125 (3.2)	2451
2432	.250 (6.4)	2452
2433	.375 (9.5)	2453
2434	.500 (12.7)	2454
2435	.625 (15.9)	2455

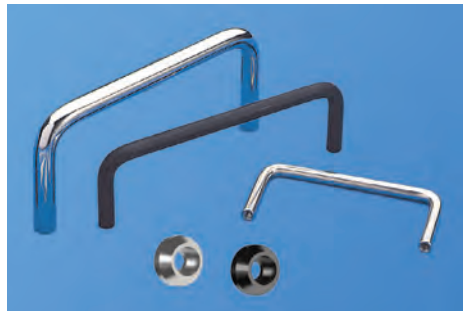
INSTRUMENTATION POINTER KNOBS

All knobs supplied with brass insert and two set screws to hold knob securely to shaft

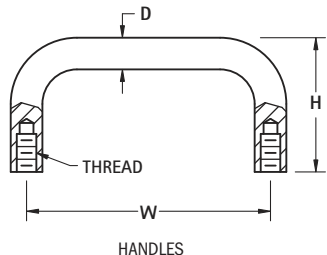
SPECIFICATIONS Knob: ABS Inlay: Spun Aluminum Insert: Brass, Nickel Plate		CAT. NO.	SHAFT (DIA.)	D (DIA.)	H (HEIGHT)	M (MAX.)	SHAFT ATTACHMENT DETAILS		NUT CLEARANCE	
							L (LOCATION)	B (DEPTH)	I.D. (DIA.)	C (C'BORE DEPTH)
		8554	.125 (3.2)	.500 (12.7)	.660 (16.8)	-	.320 (8.1)	.570 (14.5)	.360 (9.1)	.170 (4.3)
		8555	.250 (6.4)	.700 (17.8)	.780 (19.8)	-	.360 (9.1)	.680 (17.3)	.500 (12.7)	.180 (4.6)
		8556	.250 (6.4)	.920 (23.4)	1.010 (25.7)	-	.460 (11.7)	.910 (23.1)	.640 (16.3)	.330 (8.4)
		8557	.250 (6.4)	1.250 (31.8)	.828 (21.0)	-	.400 (10.2)	.700 (17.8)	1.010 (25.7)	.250 (6.4)
		8558	.125 (3.2)	.500 (12.7)	.660 (16.8)	.915 (23.4)	.320 (8.1)	.570 (14.5)	.360 (9.1)	.170 (4.3)
		8559	.250 (6.4)	.700 (17.8)	.780 (19.8)	1.150 (29.2)	.357 (9.1)	.660 (16.7)	.480 (12.2)	.180 (4.6)
		8560	.250 (6.4)	.920 (23.4)	1.010 (25.7)	1.520 (38.6)	.500 (12.7)	.910 (23.1)	.640 (16.3)	.240 (6.1)
		8561	.250 (6.4)	1.250 (31.8)	.920 (23.4)	1.860 (47.2)	.470 (11.9)	.800 (20.3)	.780 (19.8)	.350 (8.9)
		8567	.125 (3.2)	.500 (12.7)	.500 (12.7)	.610 (15.5)	.160 (4.0)	.405 (10.3)	.410 (10.4)	.030 (0.8)
		8568	.250 (6.4)	.700 (17.8)	.625 (15.9)	.820 (20.8)	.210 (5.3)	.480 (12.2)	.468 (11.9)	.030 (0.8)
		8569	.250 (6.4)	.920 (23.4)	.780 (19.8)	1.090 (27.7)	.240 (6.1)	.660 (16.8)	.640 (16.3)	.100 (2.5)
		8565	.250 (6.4)	.700 (17.8)	.630 (16.0)	1.187 (30.2)	.210 (5.3)	.510 (13.0)	.570 (14.5)	.030 (0.8)
		8566	.250 (6.4)	.920 (23.4)	.640 (16.3)	1.510 (38.6)	.260 (6.6)	.540 (13.7)	.730 (18.5)	.120 (3.1)

SPECIFICATIONS		CAT. NO.	COLOR		KNOB DIMENSIONS			NUT CLEARANCE	
Material: Colored Polypropylene hub. Thermoplastic Elastomer (TPE) - Soft-Touch gripping surface Insert: Brass, Nickel Plate			OUTSIDE	INSIDE	SHAFT (DIA.)	D (DIA.)	H (HEIGHT)	I.D. (DIA.)	C (C'BORE DEPTH)
		8570	Black	Yellow	.250 (6.4)	.610 (15.5)	.550 (14.0)	.430 (10.9)	.090 (2.3)
		8571	Black	Red					
		8572	Black	Gray					
		8573	Black	Black					

ROUND



MATERIAL:
Brass: ASTM-B16, Nickel Plate
Aluminum: 6061-T6, Black Anodized

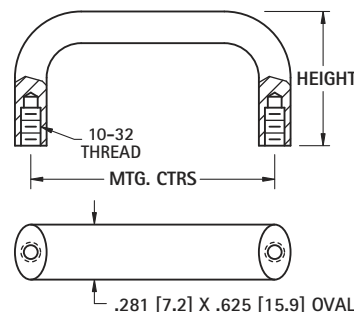


HANDLES				FERRULES			
BRASS CAT. NO.	ALUMINUM CAT. NO.	W MTG. CTRS.	H HEIGHT	THREAD	D DIAMETER	BRASS CAT. NO.	ALUMINUM CAT. NO.
7140	7170	1.250 (31.8)	1.000 (25.4)	4-40	.156 (4.0)	7162	7192
7141	7171	2.000 (50.8)	1.000 (25.4)				
7142	7172	3.000 (76.2)	1.000 (25.4)				
9100	9110	1.250 (31.8)	.625 (15.9)	4-40	.187 (4.7)	9120	9122
9101	9111	1.500 (38.1)	.625 (15.9)				
9104	9114	1.500 (38.1)	.750 (19.1)				
9102	9112	1.750 (44.5)	.625 (15.9)				
9105	9115	1.750 (44.5)	.750 (19.1)				
9103	9113	2.000 (50.8)	.625 (15.9)				
9106	9116	1.250 (31.8)	1.000 (25.4)	6-32	.187 (4.7)	9121	9123
9107	9117	1.500 (38.1)	1.000 (25.4)				
9108	9118	2.000 (50.8)	1.000 (25.4)				
9109	9119	3.000 (76.2)	1.000 (25.4)	8-32	.250 (6.4)	7163	7193
7143	7173	3.000 (76.2)	1.500 (38.1)				
485	515	3.000 (76.2)	1.750 (44.5)				
480	510	3.500 (88.9)	1.500 (38.1)				
7144	7174	4.000 (101.6)	1.500 (38.1)				
486	516	4.000 (101.6)	1.750 (44.5)				
481	511	4.500 (114.3)	1.500 (38.1)				
487	517	4.500 (114.3)	1.750 (44.5)				
482	512	5.000 (127.0)	1.500 (38.1)				
488	518	5.000 (127.0)	1.750 (44.5)				
483	513	5.500 (139.7)	1.500 (38.1)	10-32	.312 (7.9)	7164	7194
484	514	6.000 (152.4)	1.500 (38.1)				
489	519	6.000 (152.4)	1.750 (44.5)				
7145	7175	3.000 (76.2)	1.500 (38.1)				
7146	7176	4.000 (101.6)	1.500 (38.1)				
493	523	4.000 (101.6)	1.750 (44.5)				
490	520	4.500 (114.3)	1.500 (38.1)				
494	524	4.500 (114.3)	1.750 (44.5)				
7147	7177	4.562 (115.9)	1.500 (38.1)				
491	521	5.000 (127.0)	1.500 (38.1)				
495	525	5.000 (127.0)	1.750 (44.5)	10-32	.375 (9.5)	—	—
492	522	5.500 (139.7)	1.500 (38.1)				
7148	7178	6.000 (152.4)	1.500 (38.1)				
496	526	6.000 (152.4)	1.750 (44.5)				
7149	7179	6.437 (163.5)	1.750 (44.5)				
7150	7180	4.000 (101.6)	1.375 (34.9)				
7151	7181	6.000 (152.4)	1.375 (34.9)				

OVAL



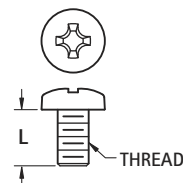
MATERIAL:
Aluminum: 6061-T6, Black Anodized



CAT. NO.	MTG. CTRS.	HEIGHT
7186	4.000 (101.6)	1.750 (44.5)
544	4.000 (101.6)	2.000 (50.8)
540	4.500 (114.3)	1.750 (44.5)
545	4.500 (114.3)	2.000 (50.8)
541	5.000 (127.0)	1.750 (44.5)
546	5.000 (127.0)	2.000 (50.8)
542	5.500 (139.7)	1.375 (34.9)
547	5.500 (139.7)	2.000 (50.8)
7187	6.000 (152.4)	1.375 (34.9)
543	6.000 (152.4)	1.750 (44.5)
548	6.000 (152.4)	2.000 (50.8)
7188	6.437 (163.5)	1.750 (44.5)

HANDLE MOUNTING SCREWS

Philips drive pan head machine screws



MATERIAL: Stainless Steel

CAT. NO.	L LENGTH	THREAD
9900	.250 (6.4)	4-40
9901	.375 (9.5)	
9902	.500 (12.7)	
9903	.250 (6.4)	6-32
9904	.375 (9.5)	
9905	.500 (12.7)	
9906	.375 (9.5)	8-32
9907	.500 (12.7)	
9908	.750 (19.1)	
9909	.375 (9.5)	10-32
9910	.500 (12.7)	
9911	.750 (19.1)	



PLASTIC FAN FILTER ASSEMBLIES

A unique package consisting of guard, filter media and retainer. The guard and retainer are manufactured with UL Rated 94V-HB material. The filter media is made of polyester foam and aluminum mesh which allows free passage of air (24 CFM) with minimum air resistance and pressure drop. A major feature of this assembly is that when the filter media requires maintenance you simply remove the snap-fit retainer to clean or replace the filter, leaving the guard and fan in place. This assures protection to the fan blades and eliminates damage to the fan or equipment during cleaning.

RETAINER

MATERIAL: Glass filled Nylon 6/6, UL Rated HB

- Snap-fit construction
- Designed for minimum air restriction

MEDIA

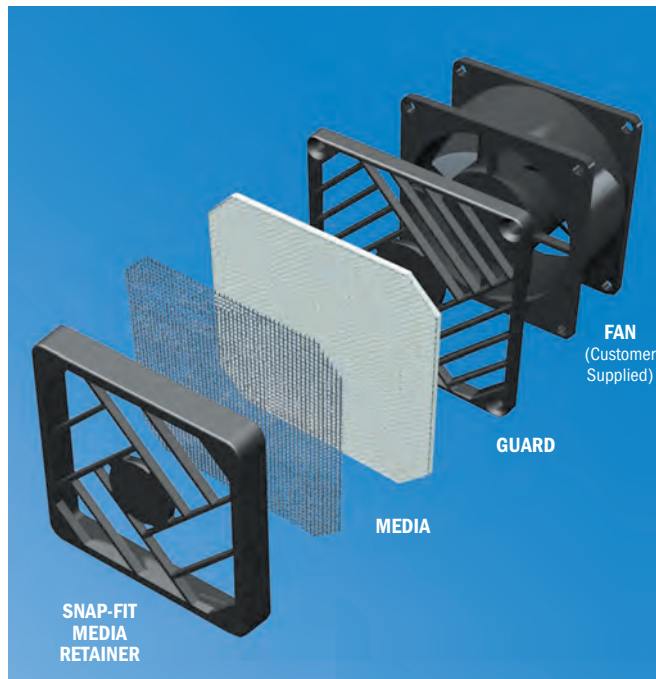
MATERIAL: White Polyester foam and Aluminum screen

- Constructed to allow free passage of air with minimum resistance and pressure drop (24 CFM)
- Has a high surface-area contact for impingement of dust particles
- Helps reduce external fan noise
- Easily cleaned by vacuuming or washing with mild soap, detergent or cleaning solvent
- Replacement media available

GUARD

MATERIAL: Glass filled Nylon 6/6, UL Rated HB

- .250 (6.4) maximum ring spacing
- Decreased noise level
- Countersunk mounting holes (4)
- Withstands high impact



FAN GUARD & FILTER ASSEMBLIES

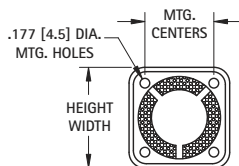


Fig. 1

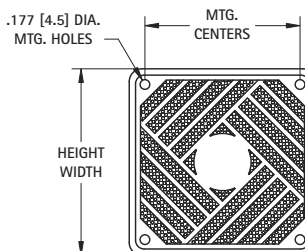


Fig. 2

assembly CAT. NO.	FIG. NO.	FOR FAN SIZE	HEIGHT/ WIDTH	THICKNESS	MTG. CENTERS	FILTER MEDIA ONLY CAT. NO.
8443	1	1.50 (40mm)	1.839 (46.7)	.327 (8.3)	1.260 (32.0)	8443-MO
8444	2	2.50 (60mm)	2.559 (65.0)	.488 (12.4)	1.970 (50.0)	8444-MO
8487	2	3.12 (80mm)	3.408 (86.6)	.488 (12.4)	2.840 (72.0)	8487-MO
8488	2	3.62 (92mm)	3.815 (96.9)	.488 (12.4)	3.250 (82.5)	8488-MO
8489	2	4.50 (120mm)	4.961 (126.0)	.496 (12.6)	4.130 (105.0)	8489-MO

FAN GUARDS

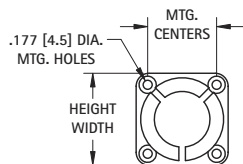


Fig. 3

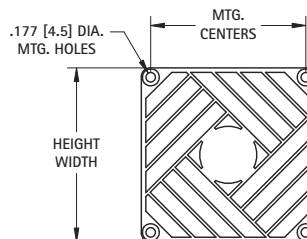
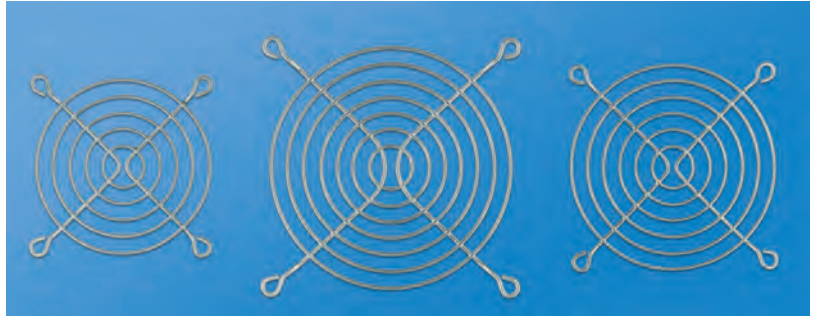


Fig. 4

guard CAT. NO.	FIG. NO.	FOR FAN SIZE	HEIGHT/ WIDTH	THICKNESS	MTG. HOLE CENTER SPACING
8445	3	1.50 (40mm)	1.681 (42.7)	.169 (4.3)	1.260 (32.0)
8446	4	2.50 (60mm)	2.378 (60.4)	.236 (6.0)	1.970 (50.0)
8497	4	3.12 (80mm)	3.177 (80.7)	.236 (6.0)	2.840 (72.0)
8498	4	3.62 (92mm)	3.634 (92.3)	.236 (6.0)	3.250 (82.5)
8499	4	4.50 (120mm)	4.741 (120.4)	.244 (6.2)	4.130 (105.0)

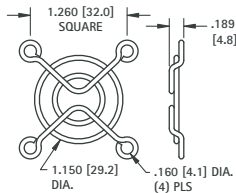
Made of high quality steel wire which combines strength with superior forming. The units offer clean, strong butt welds with minimum flash and have consistent guard diameters to enhance maximum air-flow and venting.

- Available for most popular size fans
- Protects fingers as well as fan blades
- Same mounting hole pattern as standard fans
- Chrome Plate offers a high luster finish



MATERIAL: Steel, Nickel Chrome Plate

FITS 1.50" (40mm) FANS

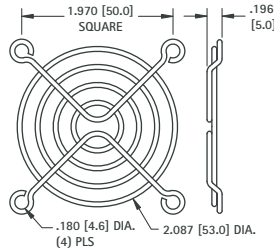


CONSTRUCTION

Rings: .063 (1.60) wire diameter
Ribs: .063 (1.60) wire diameter

CAT. NO. 8447

FITS 2.50" (60mm) FANS

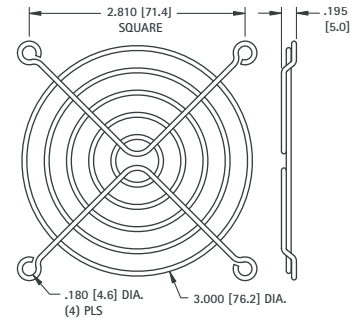


CONSTRUCTION

Rings: .063 (1.60) wire diameter
Ribs: .063 (1.60) wire diameter

CAT. NO. 8449

FITS 3.12" (80mm) FANS

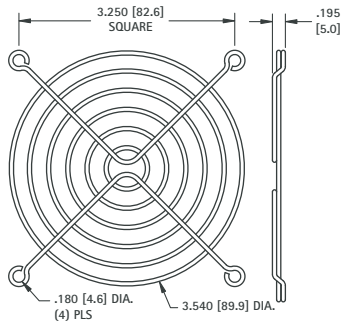


CONSTRUCTION

Rings: .063 (1.60) wire diameter
Ribs: .063 (1.60) wire diameter

CAT. NO. 8450

FITS 3.62" (92mm) FANS

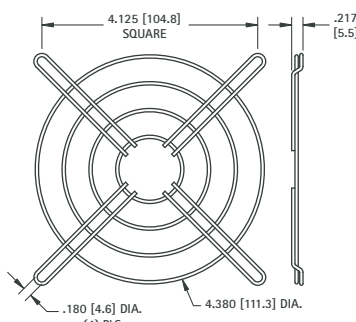


CONSTRUCTION

Rings: .063 (1.60) wire diameter
Ribs: .063 (1.60) wire diameter

CAT. NO. 8451

FITS 4.50" (120mm) FANS

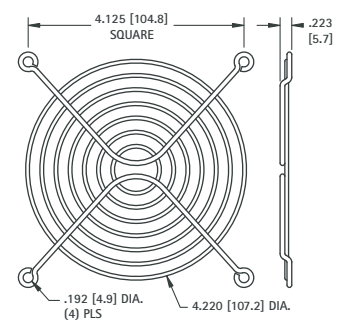


CONSTRUCTION

Rings: .063 (1.60) wire diameter
Ribs: .063 (1.60) wire diameter

CAT. NO. 8448

FITS 4.50" (120mm) FANS

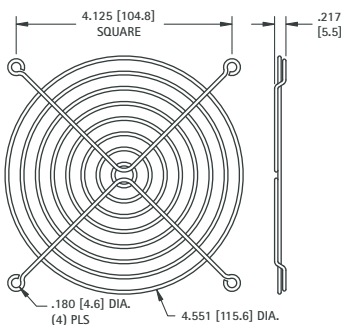


CONSTRUCTION

Rings: .071 (1.80) wire diameter
Ribs: .091 (2.31) wire diameter

CAT. NO. 8452

FITS 4.50" (120mm) FANS

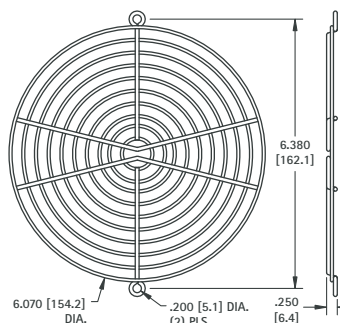


CONSTRUCTION

Rings: .071 (1.80) wire diameter
Ribs: .071 (1.80) wire diameter

CAT. NO. 8453

FITS 6.00" (150mm) FANS

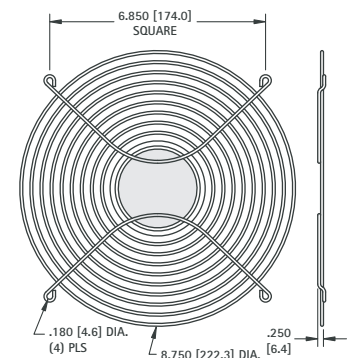


CONSTRUCTION

Rings: .071 (1.80) wire diameter
Ribs: .091 (2.31) wire diameter

CAT. NO. 8455

FITS 10.00" (250mm) FANS



CONSTRUCTION

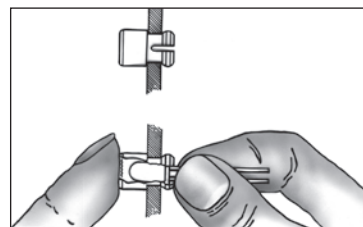
Rings: .091 (2.31) wire diameter
Ribs: .091 (2.31) wire diameter

CAT. NO. 8457

Designed for use with T-1 or T-1 3/4 LEDs, these Lens Caps are available in round or square configurations. They snap-mount through the front panel for easy, light-finger pressure, installation. The LED is inserted into the cap from behind the panel and held securely in place.



MATERIAL: Polycarbonate
Available in Red, Green, Yellow and Clear



ROUND CAPS

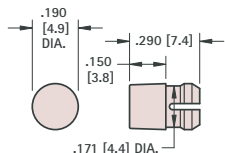


FIG. 1 T-1

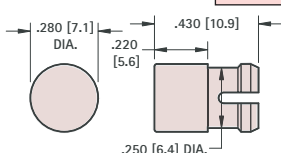


FIG. 2 T-1 3/4

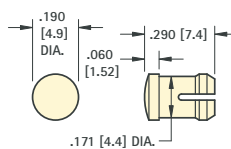


FIG. 3 T-1

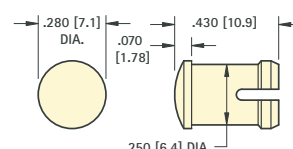


FIG. 4 T-1 3/4

STANDARD HEIGHT

CAT. NO.	COLOR	FIG. NO.	LED SIZE	MTG. HOLE SIZE	MIN. MTG. CENTERS	PANEL THICKNESS
8650	RED	1	T-1	.171 (4.3)	.250 (6.4)	.031 - .062 (.79/1.57)
8651	GREEN					
8652	YELLOW					
8653	CLEAR					
8662	RED	2	T-1 3/4	.250 (6.4)	.375 (9.5)	.062 - .125 (1.57/3.18)
8663	GREEN					
8664	YELLOW					
8665	CLEAR					

LOW PROFILE

CAT. NO.	COLOR	FIG. NO.	LED SIZE	MTG. HOLE SIZE	MIN. MTG. CENTERS	PANEL THICKNESS
8656	RED	3	T-1	.171 (4.3)	.250 (6.4)	.062 - .125 (1.57/3.18)
8657	GREEN					
8658	YELLOW					
8659	CLEAR	4	T-1 3/4	.250 (6.4)	.375 (9.5)	.031 - .250 (.79/6.4) (See Note)
8668	RED					
8669	GREEN					
8670	YELLOW					
8671	CLEAR					

SQUARE CAPS

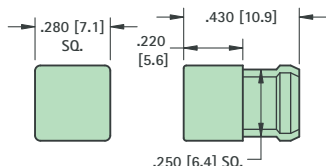


FIG. 5 T-1 3/4

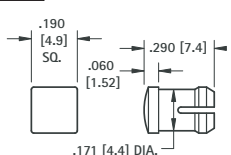


FIG. 6 T-1

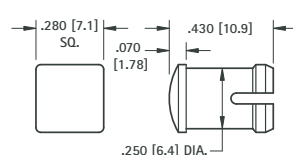


FIG. 7 T-1 3/4

STANDARD HEIGHT

CAT. NO.	COLOR	FIG. NO.	LED SIZE	MTG. HOLE SIZE	MIN. MTG. CENTERS	PANEL THICKNESS
8680	RED	5	T-1 3/4	.250 (6.4) SQUARE	.375 (9.5)	.062 - .125 (1.57/3.18)
8681	GREEN					
8682	YELLOW					
8683	CLEAR					

LOW PROFILE

CAT. NO.	COLOR	FIG. NO.	LED SIZE	MTG. HOLE SIZE	MIN. MTG. CENTERS	PANEL THICKNESS
8674	RED	6	T-1	.171 (4.3)	.250 (6.4)	.062 - .125 (1.57/3.18)
8675	GREEN					
8676	YELLOW					
8677	CLEAR					
8686	RED	7	T-1 3/4	.250 (6.4)	.375 (9.5)	.031 - .250 (.79/6.4) (See Note)
8687	GREEN					
8688	YELLOW					
8689	CLEAR					

Note: When mounting T-1 3/4 Low Profile Caps (Fig. 4 or Fig. 7) in panels .125 (3.2) thick or less a spacer must be used. **Spacer CAT. NO. 8692 MATERIAL:** White Nylon .360 (9.1) O.D. × 1/4 I.D. × 1/8 Lg.

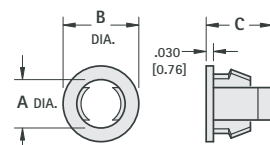
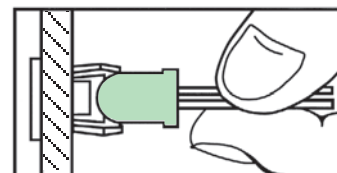
"SNAP-IN" T-1 & T-1 3/4 LED HOLDERS



Designed for use with T-1 or T-1 3/4 LED's in .060 (1.52) - .070 (1.78) thick panels. The holder snaps into the front panel with easy, light-finger pressure. The LED snaps into the holder from behind the panel and is held securely in place.

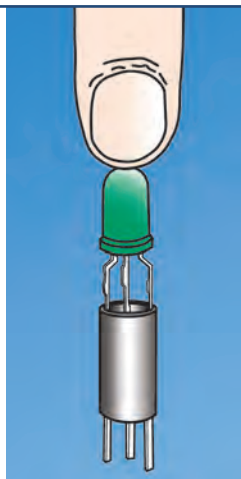
MATERIAL: Nylon 6/6, Black

CAT. NO.	LED SIZE	A	B	C	MTG. HOLE SIZE
8309	T-1	.114 (2.9)	.232 (5.9)	.188 (4.8)	.171 (4.3)
8310	T-1 3/4	.200 (5.0)	.315 (8.0)	.274 (6.9)	.250 (6.4)

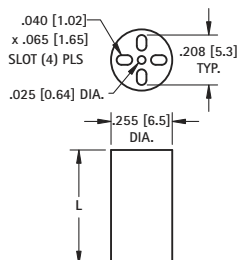


"UNIVERSAL" FOR T-1 & T-1 3/4

- Unique design separates leads and retains Tri-Lead and Bi-Lead components
- Designed for PC board mounting of Tri-Lead and Bi-Lead T-1 and T-1 3/4 LEDs
- Provides height control, lead retention and stability
- Also suitable for mounting lamps, resistors, transistors, diodes, capacitors, etc.



T1 & T-1 3/4



MATERIAL: Black PVC, UL Rated 94V-0

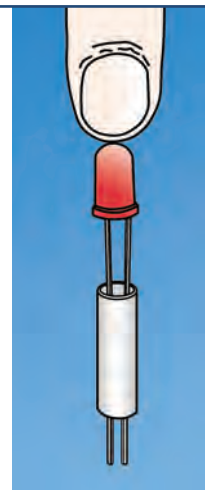
FOR T-1 and T-1 3/4			
CAT. NO.	L LENGTH	CAT. NO.	L LENGTH
8900	.120 (3.0)	8916	.400 (10.2)
8901	.140 (3.6)	8917	.420 (10.7)
8902	.160 (4.1)	8918	.440 (11.2)
8903	.180 (4.6)	8919	.450 (11.4)
8904	.200 (5.1)	8920	.460 (11.7)
8905	.220 (5.6)	8921	.480 (12.2)
8906	.240 (6.1)	8922	.500 (12.7)
8907	.250 (6.4)	8923	.550 (14.0)
8908	.260 (6.6)	8924	.600 (15.2)
8909	.280 (7.1)	8925	.650 (16.5)
8910	.300 (7.6)	8926	.700 (17.8)
8911	.320 (8.1)	8927	.750 (19.1)
8912	.340 (8.6)	8928	.800 (20.3)
8913	.350 (8.9)	8929	.850 (21.6)
8914	.360 (9.1)	8930	.900 (22.9)
8915	.380 (9.7)	8931	.925 (23.5)

"SELF-ALIGNING" FOR BI-LEAD T-1 & T-1 3/4

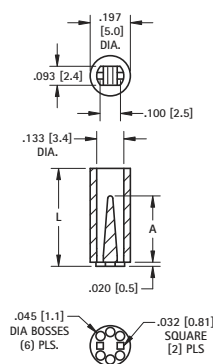


KEY FEATURES

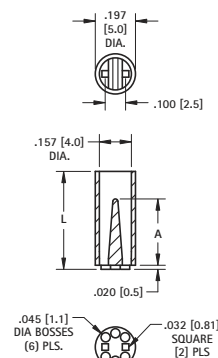
- Positive self-alignment of leads on .100 (.25) centers.
- No special tools required
- This features an internally tapered barrier which guides the leads and eliminates crimping or shorting
- The bottom bosses serve the dual purpose of heat dissipation and easy post soldering cleanup



T-1



T-1 3/4



MATERIAL: Natural Nylon, UL Rated 94V-2

T-1	T-1 3/4			T-1	T-1 3/4		
CAT. NO.	CAT. NO.	L LENGTH	A REF.	CAT. NO.	CAT. NO.	L LENGTH	A REF.
7351	8311	.120 (3.0)	.075 (1.9)	7367	8327	.400 (10.2)	.325 (8.3)
7352	8312	.140 (3.6)		7368	8328	.420 (10.7)	
7353	8313	.160 (4.1)		7369	8329	.440 (11.2)	
7354	8314	.180 (4.6)		7370	8330	.450 (11.4)	
7355	8315	.200 (5.1)		7371	8331	.460 (11.7)	
7356	8316	.220 (5.6)	.190 (4.8)	7372	8332	.480 (12.2)	.450 (11.4)
7357	8317	.240 (6.1)		7373	8333	.500 (12.7)	
7358	8318	.250 (6.4)		7374	8334	.550 (14.0)	
7359	8319	.260 (6.6)		7375	8335	.600 (15.2)	
7360	8320	.280 (7.1)		7376	8336	.650 (16.5)	.575 (14.6)
7361	8321	.300 (7.6)	.200 (5.1)	7377	8337	.700 (17.8)	
7362	8322	.320 (8.1)		7378	8338	.750 (19.1)	
7363	8323	.340 (8.6)		7379	8339	.800 (20.3)	
7364	8324	.350 (8.9)		7380	8340	.850 (21.6)	
7365	8325	.360 (9.1)	.325 (8.3)	7381	8341	.900 (22.9)	.690 (17.5)
7366	8326	.380 (9.7)		7382	8342	.925 (23.5)	