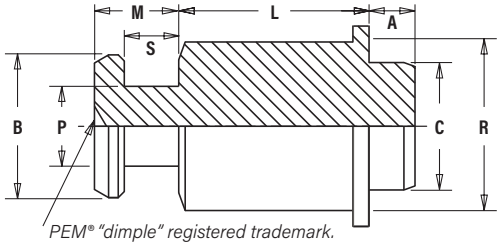
SMTSK™ REELFAST® KEYHOLE® STANDOFFS

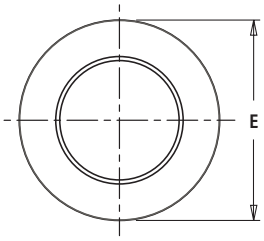
PEM® surface mounted standoffs that eliminate the need for attaching screws

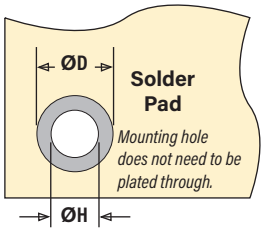
PEM® SMTSK™ standoffs are designed so that a PC board or panel can be quickly slipped into place and then removed from an assembly by simply sliding the board sideways and lifting it off. These standoffs mount on PC Boards in the same manner and at the same time as other surface mount components prior to the automated reflow solder process.

- Reduces scrap, handling and risk of board damage.
- Unique barrel design allows for quick attachment and detachment.
- Makes horizontal or vertical component mounting possible.
- Provided on tape and reel compatible with existing SMT automated installation equipment.

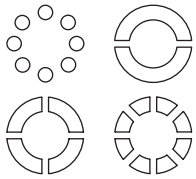
NEW







Stencil Masking Examples



All dimensions are in inches.

	Type	Body Size - Sheet Code	Length "L" ± .005 (Length Code in 32nds of an inch)			Min. Sheet Thickness	A Max.	C Max.	E ±.005	B ±.003	P ±.003	R Max.	S ±.003	M Max.	ØH Hole Size in Sheet +.003 -.000	ØD Min. Solder Pad
			.125	.250	.375											
UNIFIED	SMTSK	6060	4	8	12	.060	.060	.161	.250	.177	.099	.212	.068	.108	.166	.276

All dimensions are in millimeters.

	Type	Body Size - Sheet Code	Length "L" ± 0.13 (Length Code in millimeters)					Min. Sheet Thickness	A Max.	C Max.	E ±0.13	B ±.0.08	P ±0.08	R Max.	S ±0.08	M Max.	ØH Hole Size in Sheet +0.08	ØD Min. Solder Pad
METRIC	SMTSK	61.5	3	4	6	8	10	1.53	1.53	4.09	6.35	4.5	2.51	5.39	1.73	2.75	4.22	7

Fastener Material: Carbon Steel
Standard Finish: Electro-plated tin ASTM B 545, Class B with clear preservative coating, annealed(1)(2)
For use in: PC Board

PART NUMBER DESIGNATION

SMTSK - 6 060 - 12 ET

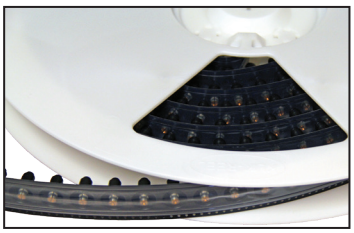
Type	Body Size Code	Sheet Thickness	Length Code	Finish

(1) See PEM® Technical Support section of our website for related plating standards and specifications.
(2) Optimal solderability life noted on package.

NUMBER OF PARTS PER REEL

Part Number	Length Code "L"		
	.125	.250	.375
SMTSK-6060	4	8	12
	630	440	230

Part Number	Length Code "L"				
SMTSK-61.5	3	4	6	8	10
	640	540	440	260	220



Packaged on 13" recyclable reels. Tape width is 24mm and 16mm. Pitch is 16mm and 12mm. Reels conform to EIA-481.

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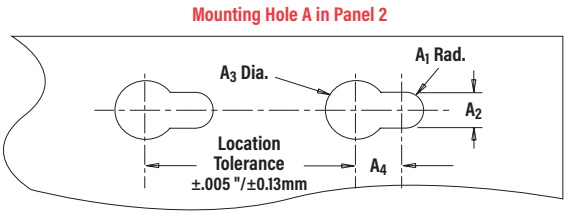
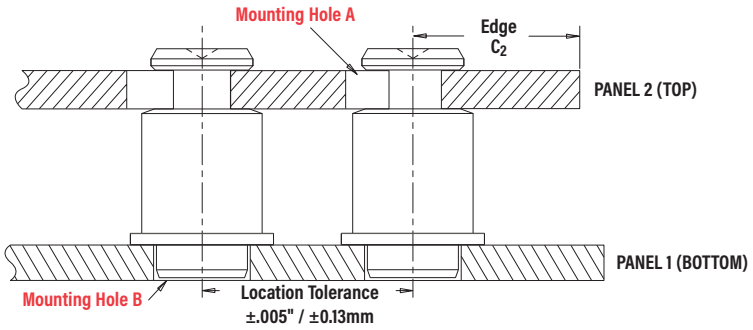
APPLICATION DATA





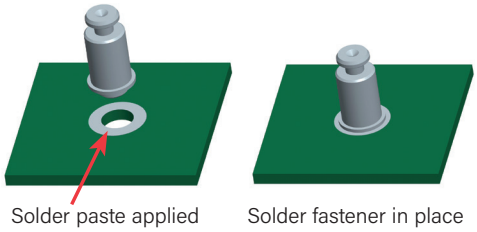
All dimensions are in inches.

		Panel 1					Panel 2						
							Top Mounting Hole A						
UNIFIED	Type	Hardness Max.	Bottom Mounting Hole B +.003 -.000	Panel Material	Thickness Min.	Location Tolerance	A_1 Nom.	A_2 ±.003	A_3 ±.003	A_4 Min.	Panel Material	Thickness Range	Edge Distance C_2 Min.
	SMTSK	No Limit	.166	PC Board	.060	±.005	.059	.118	.197	.148	ANY	.057 - .064	.160

All dimensions are in millimeters.

		Panel 1					Panel 2						
							Top Mounting Hole A						
METRIC	Type	Hardness Max.	Bottom Mounting Hole B +0.08	Panel Material	Thickness Min.	Location Tolerance	A_1 Nom.	A_2 ±0.08	A_3 ±0.08	A_4 Min.	Panel Material	Thickness Range	Edge Distance C_2 Min.
	SMTSK	No Limit	4.22	PC Board	1.53	±0.13	1.5	3	5	3.75	ANY	1.45 - 1.62	4.1

INSTALLATION



Solder paste applied to pad on PCB.

Solder fastener in place using standard surface mount techniques.

Fastener drawings and models are available at www.pemnet.com

PERFORMANCE DATA(1)

	Panel 1 (Bottom)	
Type and Size	Test Sheet Material	Pushout (2)
SMTSK-6060	.062" Single Layer FR-4	113 lbs.
SMTSK-61.5	1.58 mm Single Layer FR-4	500 N

(1) Further testing details can be found in our website's literature section.

(2) With lead-free paste. Average values of 30 test points. The data presented here is for general comparison purposes only. Actual performance is dependent upon application variables. We will be happy to provide samples for you to install. If required, we can also test your installed hardware and provide you with the performance data specific to your application.

TESTING CONDITIONS

Oven	Quad ZCR convection oven with 4 zones	**Vias**	None
High Temp	473˚F / 245˚C	**Spokes**	2 Spoke Pattern
Board Finish	62% Sn, 38% Pb	**Paste**	Alpha CVP-390 Sn96.5/3.0Ag/ 0.5Cu (SAC305)
Board	.062" / 1.58 mm thick, Single Layer FR-4	**Stencil**	.0067" / 0.17 mm thick
Screen Printer	Ragin Manual Printer		

All PEM® products meet our stringent quality standards. If you require additional industry or other specific quality certifications, special procedures and/or part numbers are required. Please contact your local sales office or representative for further information.

Regulatory compliance information is available in Technical Support section of our website. Specifications subject to change without notice. See our website for the most current version of this bulletin.

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