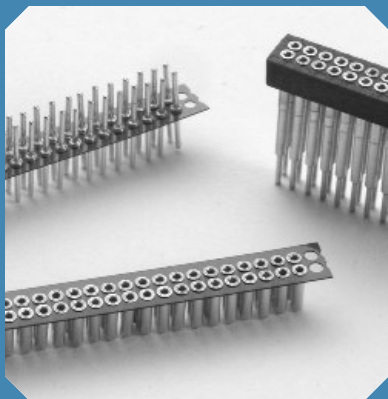


Board to Board Connectors

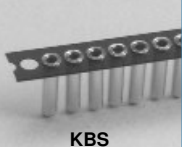

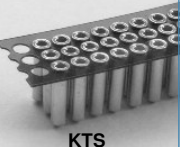

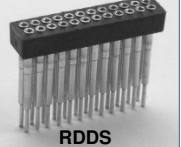
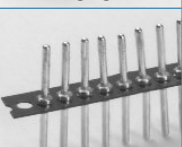




Features:

- Male and female connectors are designed in mating pairs.
- .050/(1.27mm) row to row pitch.
- High reliability screw-machined terminals with closed-end construction for 100% anti-wicking of solder.
- For surface mount options, consult factory.
- Reliable mechanical support.
- Custom configurations available.

.050/(1.27mm) Pitch Board to Board Connectors Molded and Peel-A-Way® Insulators

Table of Models

	Single Row	Dual Row	Triple Row	
Female	 KBS	 KNS	 KTS	Description: Peel-A-Way® (KBS, KNS, KTS) Material: Polyimide Film Index: -269°C to 400°C (-452°F to 752°F)
	 FSDS	 RDDS (RDD*)		Description: FR-4 (FSDS) Mat'l: FR-4 Fiberglass Epoxy Board Index: -40°C to 140°C (-40°F to 284°F) Description: Molded (RDDS, RDD) Mat'l: High Temp. Liquid Crystal Polymer (LCP) Index: -40°C to 260°C (-40°F to 500°F)
Male	 KBA	 KNA (KDA*)	 KTA	Description: Peel-A-Way® (KBA, KNA, KDA, KTA) Material: Polyimide Film Index: -269°C to 400°C (-452°F to 752°F)

* RDD and KDA have .100/(2.54mm) pitch between rows.

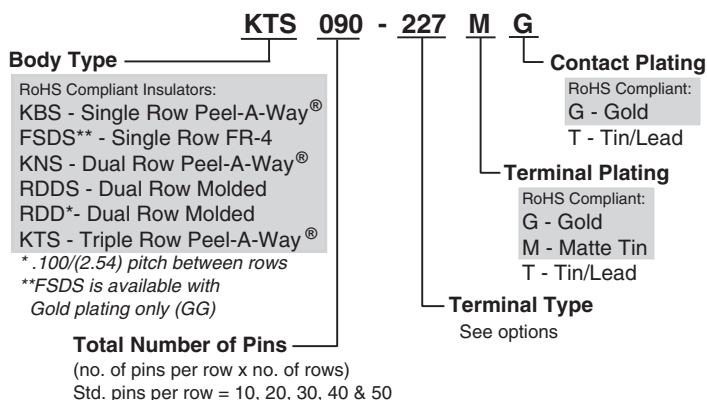
Note: FSDS replaces SDS, HSDS, and RSDS.

RDDS replaces DDS and HDDS.

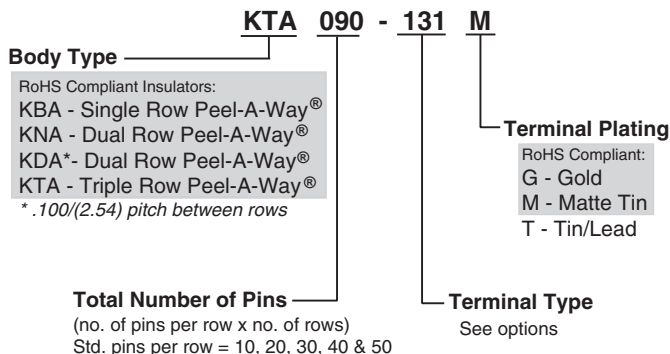
RDD replaces DD.

How To Order

Female



Male



Note: Terminals plated with Matte Tin are available only with Gold plated contacts.

Quick-Turn delivery is not available on products with Matte Tin plating.

Products shown covered by patents issued and/or pending. Specifications subject to change without notice.

inch/(mm)



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.050/(1.27mm) Pitch Board to Board Connectors

Molded and Peel-A-Way® Insulators



Additional standard and custom terminals available.
See Terminals section or consult factory.

Standard Quick-Turn Female Terminals

Type -168	Type -347	Type -205	Type -227
Molded or FR-4 only	Molded or FR-4 only	Molded or FR-4 only (Not Quick-Turn)	Peel-A-Way® only (Not Quick-Turn)

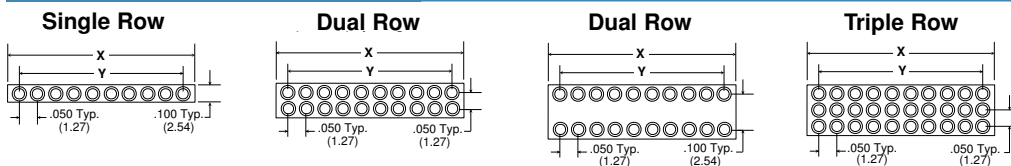
Standard Male Terminals - Surface Mount

Type -525	Type -526
Peel-A-Way® only	Peel-A-Way® only

Standard Quick-Turn Male Terminals - Thru-Hole

Type -131	Type -322	Type -321
Peel-A-Way® only	Peel-A-Way® only	Peel-A-Way® only (Not Quick-Turn)

Dimensional Information



Molded or FR-4

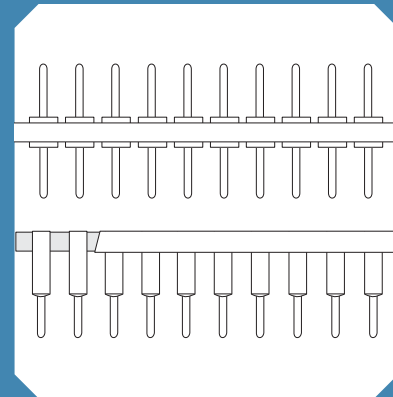
Total # of Pins per Connector			# of Pins Per Row	X in. (mm)	Y in. (mm)
Single	Dual	Triple			
010	020	030	10	.550 (13.97)	.450 (11.43)
020	040	060	20	1.050 (26.67)	.950 (24.13)
030	060	090	30	1.550 (39.37)	1.450 (36.83)
040	080	120	40	2.050 (52.07)	1.950 (49.53)
050	100	150	50	2.550 (64.77)	2.450 (62.23)

Peel-A-Way®

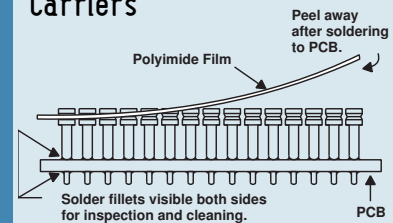
Total # of Pins per Connector			# of Pins Per Row	X in. (mm)	Y in. (mm)
Single	Dual	Triple			
010	020	030	10	.650 (16.51)	.450 (11.43)
020	040	060	20	1.150 (29.21)	.950 (24.13)
030	060	090	30	1.650 (41.91)	1.450 (36.83)
040	080	120	40	2.150 (54.61)	1.950 (49.53)
050	100	150	50	2.650 (67.31)	2.450 (62.23)

Multiply number of rows by number of pins per row for total pin count in part number.

Board to Board Connectors



Peel-A-Way® Removable Carriers



1. Place socket on PC board.
2. Send PC board and socket through soldering operation.
3. Peel away polyimide film carrier for complete solder joint visibility or leave in place for added stability.

Available Online:

- RoHS Qualification Test Report

See following pages for typical board to board spacing configuration and additional dimensional information.



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Dimensional Information

Thru-Hole Female & Male

Figure 1
Peel-A-Way® Female &
Peel-A-Way® Male

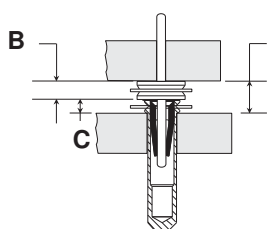
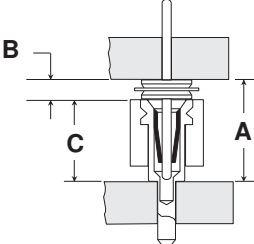
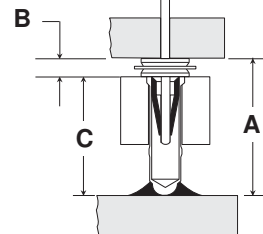


Figure 2
Molded or FR-4 Female
& Peel-A-Way® Male



Surface Mount Female & Thru-Hole Male

Figure 3
Molded or FR-4 Female
& Peel-A-Way® Male



Order one each Male & Female
to get the required "A" dim.

B	C	A	Male Part #	Female Part #	Fig.
.031/(.79)	.015/(.38)	.046/(1.17)	KBA020-131G	KBS020-227MG	1
.070/(1.78)	.015/(.38)	.085/(2.16)	KBA020-321G	KBS020-227MG	1
.085/(2.16)	.015/(.38)	.100/(2.54)	KBA020-322G	KBS020-227MG	1
.031/(.79)	.112/(2.84)	.143/(3.63)	KBA020-131G	FSDS020-557GG	2
.031/(.79)	.118/(3.00)	.149/(3.79)	KBA020-131G	FSDS020-551GG	3
.070/(1.78)	.112/(2.84)	.182/(4.62)	KBA020-321G	FSDS020-557GG	2
.070/(1.78)	.118/(3.00)	.188/(4.78)	KBA020-321G	FSDS020-551GG	3
.030/(.76)	.161/(4.09)	.192/(4.88)	KBA020-131G	FSDS020-553GG	3
.031/(.79)	.165/(4.19)	.196/(4.98)	KBA020-131G	FSDS020-168GG	2
.085/(2.16)	.112/(2.84)	.197/(5.00)	KBA020-322G	FSDS020-557GG	2
.085/(2.16)	.118/(3.00)	.203/(5.16)	KBA020-322G	FSDS020-551GG	3
.070/(1.78)	.161/(4.09)	.231/(5.87)	KBA020-321G	FSDS020-553GG	3
.070/(1.78)	.165/(4.19)	.235/(5.97)	KBA020-321G	FSDS020-168GG	2
.085/(2.16)	.165/(4.19)	.250/(6.35)	KBA020-322G	FSDS020-168GG	2
.085/(2.16)	.161/(4.09)	.246/(6.25)	KBA020-322G	FSDS020-553GG	3
.031/(.79)	.278/(7.06)	.309/(7.85)	KBA020-131G	FSDS020-205GG	2
.070/(1.78)	.278/(7.06)	.348/(8.84)	KBA020-321G	FSDS020-205GG	2
.085/(2.16)	.278/(7.06)	.363/(9.22)	KBA020-322G	FSDS020-205GG	2

20 position single row part numbers shown.
See How To Order section for ordering information.

If required "A" dimension is not shown, consult factory.

Dimensional Information

Thru-Hole Female & Surface Mount Male

Figure 4
Peel-A-Way®
Female & Male

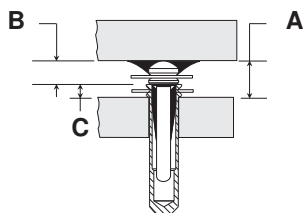
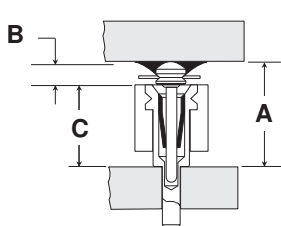
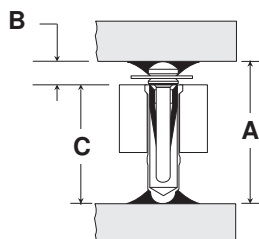


Figure 5
Molded or FR-4 Female
& Peel-A-Way® Male



Surface Mount Female & Male

Figure 6
Molded or FR-4 Female
& Peel-A-Way® Male



Order one each Male & Female
to get the required "A" dim.

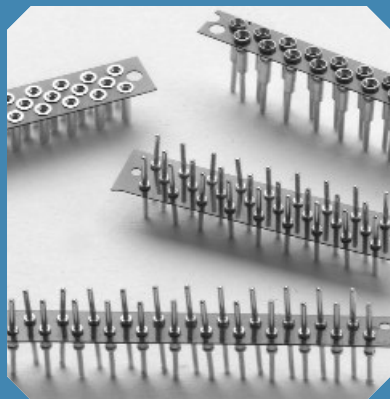
B	C	A	Male Part #	Female Part #	Fig.
.031/(.79)	.015/(.38)	.046/(1.17)	KBA020-525G	KBS020-227MG	4
.050/(1.27)	.015/(.38)	.065/(1.65)	KBA020-526G	KBS020-227MG	4
.050/(1.27)	.118/(3.00)	.168/(4.27)	KBA020-526G	FSDS020-551GG	6
.031/(.79)	.161/(4.09)	.192/(4.88)	KBA020-525G	FSDS020-553GG	6
.031/(.79)	.165/(4.19)	.196/(4.98)	KBA020-525G	FSDS020-168GG	5
.050/(1.27)	.161/(4.09)	.211/(5.36)	KBA020-526G	FSDS020-553GG	6
.050/(1.27)	.165/(4.19)	.215/(5.46)	KBA020-526G	FSDS020-168GG	5
.031/(.79)	.278/(7.06)	.309/(7.85)	KBA020-525G	FSDS020-205GG	5
.050/(1.27)	.278/(7.06)	.326/(8.33)	KBA020-526G	FSDS020-205GG	5

20 position single row part numbers shown.

See How To Order section for ordering information.

If required "A" dimension is not shown, consult factory.

Board to Board Connectors



Features:

- Supplied in high temperature Peel-A-Way® removable terminal carrier.
- Female and male connectors are designed in mating pairs.
- .050/(1.27mm) row to row pitch.
- High reliability screw-machined terminals with closed-end construction for 100% anti-wicking of solder.
- Custom configurations available.

Specifications:

Terminals:

Brass - Copper Alloy
(C36000) ASTM-B-16

Contacts:

Beryllium Copper
(C17200) ASTM-B-194

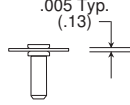
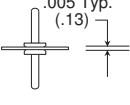
Plating:

G - Gold over Nickel
M - Matte Tin over Nickel
T - Tin/Lead over Nickel

Gold per ASTM-B-488
Matte Tin per ASTM545-97
Tin/Lead per MIL-P-81728
Nickel per QQ-N-290

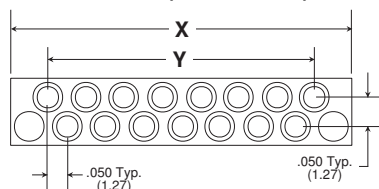
Staggered .050/(1.27mm) Pitch Board to Board Connectors Peel-A-Way® Insulators

Table of Models

Female	Dual Row	Triple Row	Description: Peel-A-Way® (KMS, KMD, KMT) Material: Polyimide Film Index: -269°C to 400°C (-452°F to 752°F)	
	KES	HKS		
Male	KEA	HKA	Description: Peel-A-Way® (KMA, KMB, KMC) Material: Polyimide Film Index: -269°C to 400°C (-452°F to 752°F)	

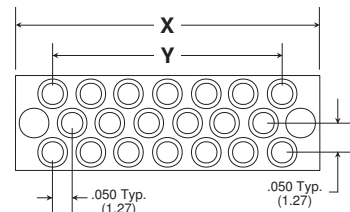
Dimensional Information

Dual Row (ex. KES015-)



# of Pins Total	X in. (mm)	Y in. (mm)
5	.400 (10.16)	.200 (5.08)
9	.600 (15.24)	.400 (10.16)
15	.900 (22.86)	.700 (17.78)
19	1.100 (27.94)	.900 (22.86)
25	1.400 (35.56)	2.450 (30.48)

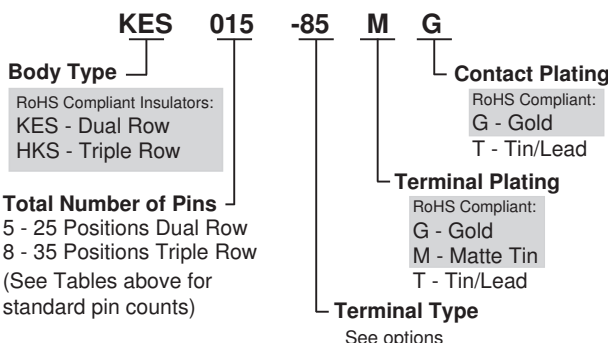
Triple Row (ex. HKS020-)



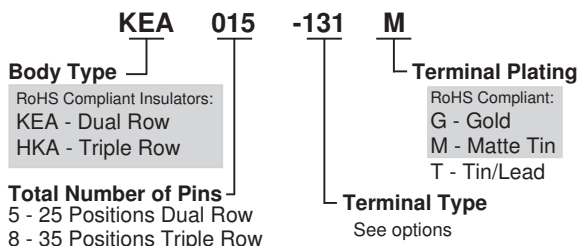
# of Pins Total	X in. (mm)	Y in. (mm)
8	.400 (10.16)	.200 (5.08)
14	.600 (15.24)	.400 (10.16)
20	.800 (20.32)	.600 (15.24)
26	1.000 (25.40)	.800 (20.32)
35	1.300 (33.02)	1.100 (27.94)

How To Order

Female



Male



Note: Terminals plated with Matte Tin are available only with Gold plated contacts.
Quick-Turn delivery is not available on products with Matte Tin plating or Triple Row body types.

Products shown covered by patents issued and/or pending. Specifications subject to change without notice.



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inch/(mm)

Staggered .050/(1.27mm) Pitch Board to Board Connectors Peel-A-Way® Insulators



Additional standard and custom terminals available.
See Terminals section or consult factory.

Standard Female Quick-Turn Terminals

Type -85	Type -210	Type -246
(.058 Dia. (1.47)) (.031 (.79)) (.155 (3.94)) (.038 Dia. (.97))	(.058 Dia. (1.47)) (.015 (.38)) (.155 (3.94)) (.034 Dia. (.86))	(mates with -526 only) (not Quick-Turn) (.058 Dia. (1.47)) (.043 (1.09)) (.125 (3.18)) (.034 Dia. (.86))

Standard Male Quick-Turn Terminals

Type -131	Type -322	Type -321	Type -526
(.018 Dia. (.46)) (.037 Dia. (.94)) (.125 (3.18)) (.031 (.79)) (.125 (3.18)) (.018 Dia. (.46))	(.018 Dia. (.46)) (.037 Dia. (.94)) (.125 (3.18)) (.085 (2.16)) (.125 (3.18)) (.018 Dia. (.46))	(not Quick-Turn) (.018 Dia. (.46)) (.037 Dia. (.94)) (.125 (3.18)) (.070 (1.78)) (.125 (3.18)) (.018 Dia. (.46))	(not Quick-Turn) (.018 Dia. (.46)) (.110 (2.79)) (.040 Dia. (1.02)) (.050 (1.27))

Dimensional Information

Figure 1
Thru-Hole

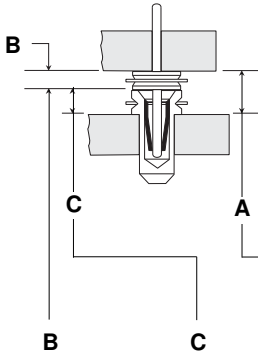
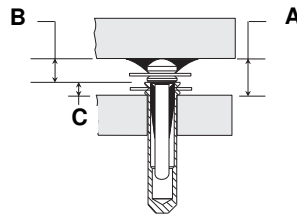


Figure 2
Surface Mount



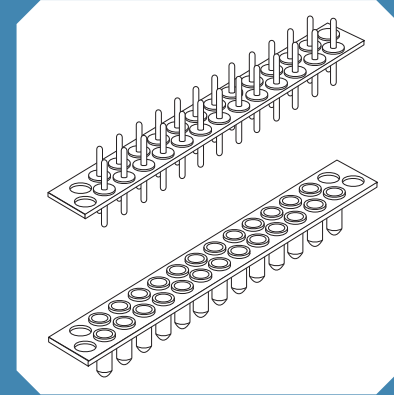
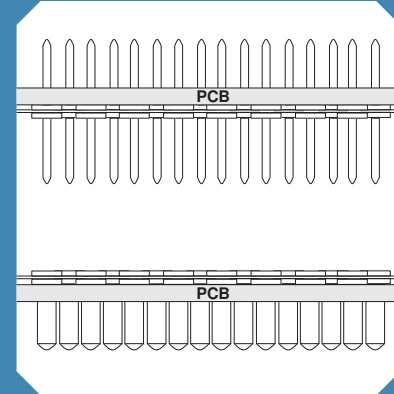
Order one each Male & Female
to get the required "A" dim.

B	C	A	Male Part #	Female Part #	Fig. #
.031/ (.79)	.015/ (.38)	.046/ (1.17)	KEA015-131G	KES015-210MG	1
.031/ (.79)	.015/ (.38)	.046/ (1.17)	KEA015-525G	KES015-210MG	2
.031/ (.79)	.031/ (.79)	.062/ (1.57)	KEA015-131G	KES015-85MG	1
.031/ (.79)	.031/ (.79)	.062/ (1.57)	KEA015-525G	KES015-85MG	2
.050/ (1.27)	.015/ (.38)	.065/ (1.65)	KEA015-526G	KES015-210MG	2
.050/ (1.27)	.031/ (.79)	.081/ (2.06)	KEA015-526G	KES015-85MG	2
.070/ (1.78)	.015/ (.38)	.085/ (2.16)	KEA015-321G	KES015-210MG	1
.050/ (1.27)	.043/ (1.09)	.093/ (2.36)	KEA015-526G	KES015-246MG	2
.085/ (2.16)	.015/ (.38)	.100/ (2.54)	KEA015-322G	KES015-210MG	1
.070/ (1.78)	.031/ (.79)	.101/ (2.57)	KEA015-321G	KES015-85MG	1
.085/ (2.16)	.031/ (.79)	.116/ (2.95)	KEA015-322G	KES015-85MG	1

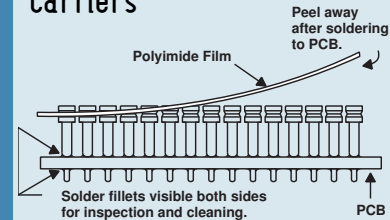
15 position dual row part numbers shown.
See How To Order section for ordering information.

If required "A" dimension is not shown, consult factory.

Board to Board Connectors



Peel-A-Way® Removable Carriers



1. Place socket on PC board.
2. Send PC board and socket through soldering operation.
3. Peel away polyimide film carrier for complete solder joint visibility or leave in place for added stability.

Available Online:

- RoHS Qualification Test Report



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