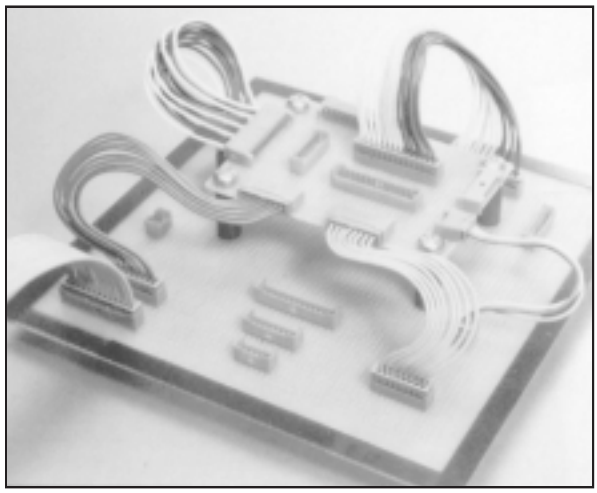
IL-Z SERIES CONNECTORS

1.25mm (.049") Contact Spacing, PCB-to-Cable (Crimp Type) Connectors



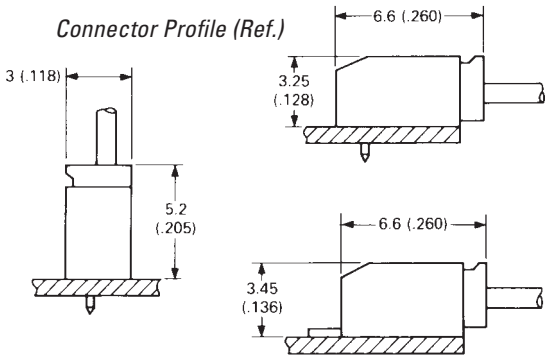
IL-Z Series connectors are designed for board-to-cable applications. High-density 1.25mm (.049") contact spacing (single row), 5.2mm (.205") high when mated vertically. Low-profile design includes board-mounted pin headers (straight and right-angle) and wire-terminated socket housings (with crimp socket contacts).

The IL-Z Series has a wide variety of applications, including commercial and household appliances, VTR's, television, office automation equipment and measuring instruments.

FEATURES

- Crimp type for efficient wire termination
- High reliability socket contacts
- High-density packaging and automatic mounting
- SMT and through hole pin headers available
- Boxed pin header design prevents mismating
- Anti-wicking feature

Connector Profile (Ref.)



GENERAL SPECIFICATIONS

Number of Contacts	2 to 15
Contact Spacing	1.25mm (.049"), single row
Current Rating	1 Amp
Dielectric Withstanding Voltage	500 VAC r.m.s. (for one minute)
Insulation Resistance	100 megohams min.
Contact Resistance	20 milliohms max.
Operating Temperature Range	-40°C to +70°C
Applicable PCB Thickness	0.6 to 1.2mm (.024 to .047")
Applicable Wire	#32 to #28 AWG (stranded)

MATERIALS AND FINISHES

Description	Materials/Finishes
Insulator	Through hole pin header and socket housing: 6-6 Nylon (UL94V-0, Light Brown) SMT pin header: PPS (UL94V-0, Light Gray)
Pin Contact	Brass/Tin plating over Nickel
Socket Contact	Phosphor Bronze/Tin plating
Hold-down	Phosphor Bronze/Tin plating (SMT only)

ORDERING INFORMATION

PIN HEADER (SMT TYPE)

IL - Z – ** P L – SMTY – E1500

- Series
- No. of Contacts
  - 2 to 15
- Contact Type
  - P – Pin
- Termination
  - L – Right Angle
- Mounting Type
  - Surface Mount Type
- Embossed Tape
  - 1,500 pcs/reel

PIN HEADER (THROUGH HOLE TYPE)
SOCKET HOUSING

IL - Z ** * S 125 * 3 *

- Series
- No. of Contacts
  - 2 to 15
- Contact Type
  - P – Pin S – Socket
- Contact Arrangement
  - S – Single Row
- Pitch
  - 1.25mm (.049")
- Termination
  - T – Straight Through Hole C – Crimp Contact
  - L – Right Angle Through Hole
- Pin Header
  - PCB Thickness: 0.6mm (.024") – 1.2mm (.047")
- Socket
  - Applicable Wire: AWG #28, #30, #32
- Pin Header
  - Solder Post Length:
    - E – 1.7mm (.067")

Dimensions and specifications subject to change without notice.

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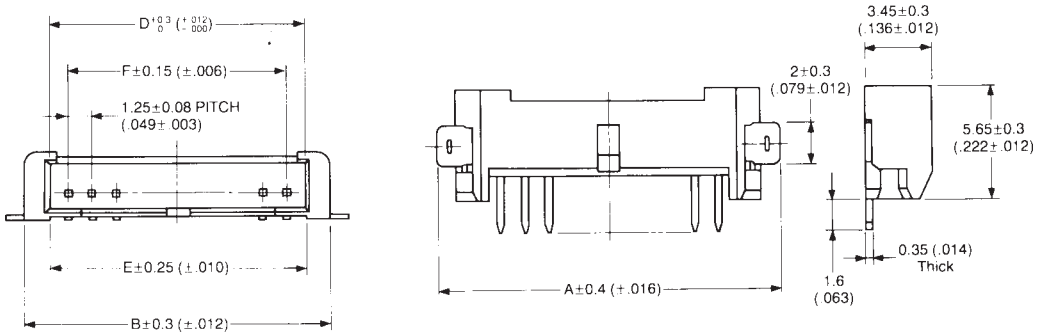
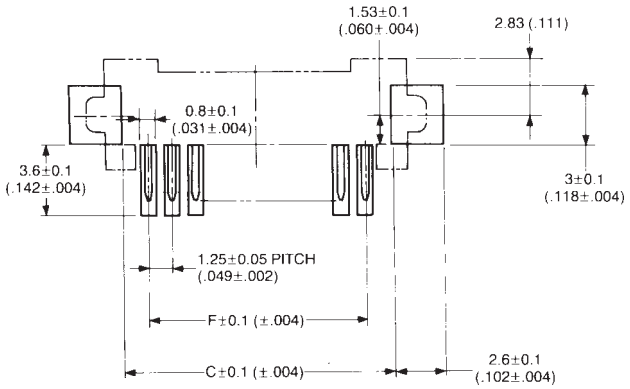
PIN HEADER (SMT TYPE)

Right Angle



PCB Layout (Ref.)



No. of Contacts	Part Number (See note.1)	A ±0.4 (±.016)	B ±0.3 (±.012)	C ±0.1 (±.004)	D +0.3 -0 (+.012 -.000)	E ±0.25 (±.010)	F
2	IL-Z- 2PL-SMTY-E1500	7.65 (.301)	5.65 (.222)	4.45 (.175)	3.25 (.128)	3.15 (.124)	1.25 (.049)
3	IL-Z- 3PL-SMTY-E1500	8.90 (.350)	6.90 (.272)	5.70 (.224)	4.50 (.177)	4.40 (.173)	2.50 (.098)
4	IL-Z- 4PL-SMTY-E1500	10.15 (.400)	8.15 (.321)	6.95 (.274)	5.75 (.226)	5.65 (.222)	3.75 (.148)
5	IL-Z- 5PL-SMTY-E1500	11.40 (.449)	9.40 (.370)	8.20 (.323)	7.00 (.276)	6.90 (.272)	5.00 (.197)
6	IL-Z- 6PL-SMTY-E1500	12.65 (.498)	10.65 (.419)	9.45 (.372)	8.25 (.325)	8.15 (.321)	6.25 (.246)
7	IL-Z- 7PL-SMTY-E1500	13.90 (.547)	11.90 (.468)	10.70 (.421)	9.50 (.374)	9.40 (.370)	7.50 (.295)
8	IL-Z- 8PL-SMTY-E1500	15.15 (.596)	13.15 (.518)	11.95 (.470)	10.75 (.423)	10.65 (.419)	8.75 (.344)
9	IL-Z- 9PL-SMTY-E1500	16.40 (.646)	14.40 (.567)	13.20 (.520)	12.00 (.472)	11.90 (.468)	10.00 (.394)
10	IL-Z-10PL-SMTY-E1500	17.65 (.695)	15.65 (.616)	14.45 (.569)	13.25 (.522)	13.15 (.518)	11.25 (.443)
11	IL-Z-11PL-SMTY-E1500	18.90 (.744)	16.90 (.665)	15.70 (.618)	14.50 (.571)	14.40 (.567)	12.50 (.492)
12	IL-Z-12PL-SMTY-E1500	20.15 (.793)	18.15 (.714)	16.95 (.667)	15.75 (.620)	15.65 (.616)	13.75 (.541)
13	IL-Z-13PL-SMTY-E1500	21.40 (.843)	19.40 (.764)	18.20 (.716)	17.00 (.669)	16.90 (.665)	15.00 (.590)
14	IL-Z-14PL-SMTY-E1500	22.65 (.892)	20.65 (.813)	19.45 (.766)	18.25 (.718)	18.15 (.714)	16.25 (.640)
15	IL-Z-15PL-SMTY-E1500	23.90 (.941)	21.90 (.862)	20.70 (.815)	19.50 (.768)	19.40 (.764)	17.50 (.689)

Note 1: Supplied in embossed-tape reels.
Suffix "-E1500" of the part number indicates that 1,500 pcs. of "IL-Z-*PL-SMTY" connectors are supplied per reel.
Please consult JAE for embossed tape specifications.

Dimensions in mm (inches).

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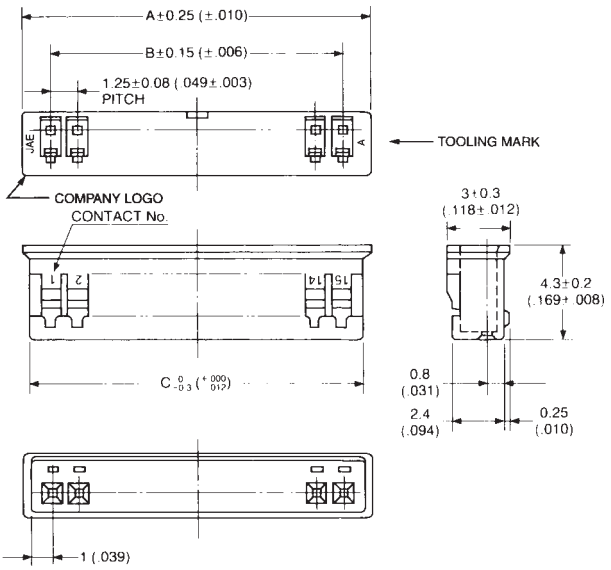
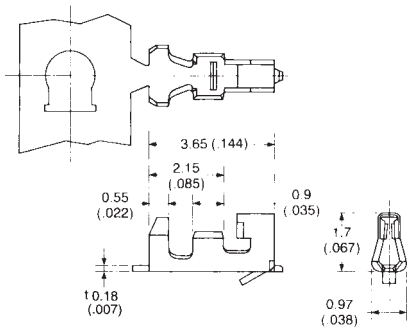
SOCKET HOUSING



SOCKET CONTACT (CRIMP TYPE)

Part Number: IL-Z-C3-A-15000 *(Note: Contacts 15,000pcs. per reel)*



Applicable Wire

Wire Size (AWG)	Insulation Outer Dia.
#32~#30	0.5mm to 0.8mm (.020" to .031")
#28	0.7mm to 1.0mm (.028" to .039")

Tooling

Description	Part Number
Semi-Automatic Crimping Machine	CT350-2-ILZ
Hand Crimping Tool	CT150-4B-ILZ
Contact Insertion Tool	IT205-1-ILZ
Contact Extraction Tool	ET-ILZ

No. of Contacts	Part Number	A ±0.25 (.010)	B ±0.15 (.006)	C +0 -0.3 (+.000 -.012)
2	IL-Z- 2S-S125C3	3.95 (.156)	1.25 (.049)	3.25 (.128)
3	IL-Z- 3S-S125C3	5.20 (.205)	2.50 (.098)	4.50 (.177)
4	IL-Z- 4S-S125C3	6.45 (.254)	3.75 (.148)	5.75 (.226)
5	IL-Z- 5S-S125C3	7.70 (.303)	5.00 (.197)	7.00 (.276)
6	IL-Z- 6S-S125C3	8.95 (.352)	6.25 (.246)	8.25 (.325)
7	IL-Z- 7S-S125C3	10.20 (.402)	7.50 (.295)	9.50 (.374)
8	IL-Z- 8S-S125C3	11.45 (.451)	8.75 (.344)	10.75 (.423)
9	IL-Z- 9S-S125C3	12.70 (.500)	10.00 (.394)	12.00 (.472)
10	IL-Z-10S-S125C3	13.95 (.549)	11.25 (.443)	13.25 (.522)
11	IL-Z-11S-S125C3	15.20 (.598)	12.50 (.492)	14.50 (.571)
12	IL-Z-12S-S125C3	16.45 (.648)	13.75 (.541)	15.75 (.620)
13	IL-Z-13S-S125C3	17.70 (.697)	15.00 (.591)	17.00 (.669)
14	IL-Z-14S-S125C3	18.95 (.746)	16.25 (.640)	18.25 (.719)
15	IL-Z-15S-S125C3	20.20 (.795)	17.50 (.689)	19.50 (.768)

Dimensions in mm (inches).

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

JAE Electronics:

IL-Z-8P-S125T3-E IL-Z-9P-S125L3-E