# RELIABILITY JUST GOT SMALLER

Harwin's Gecko (G125 series) connectors provide a low profile, dual row cable-to-board and board-to-board interconnect solution, ideally suited for stacking and cable mating in areas where PCB real estate is at a premium.

With space and weight a consideration for many high-reliability applications, G125 connectors are designed to offer high performance in a miniature package. Pin spacing of 1.25mm and up to 50 contacts per connector, offers dense pin counts in a small package. This design means that G125 connectors achieve a 35% space saving over other high-performance connectors such as Micro-D. The connectors also accommodate 2A per contact.

Tested and proven to allow high performance in extreme conditions, the G125 family can operate within a wide temperature range (-65°C / +150°C) and under extreme vibration (Z axis 100g 6ms). This high performance is made possible by Harwin's four-finger patented (pending\*) Copper Alloy Contact.

\* Patent Pending - UK 1205109.0

How To Buy

# Features

- Pin spacing of 1.25mm
- Up to 50 contacts per connector
- 35% space saving over other high-performance connectors
- 2A per contact





www.harwin-gecko.com

# Materials

Mouldings:

Female Contacts: Male Contacts:

**Finish** 

# : Electrical

Current (individual contacts in isolation): All contacts simultaneously: Working Voltage (at sea level 1006 mbar): (at altitude 44mbar) Proof voltage (at sea level 1013 mbar): Contact resistance (initial): Contact resistance (after conditioning): Insulation resistance (initial): 10 G $\Omega$  min at 500V d.c. Insulation resistance (after conditioning):

Glass-filled thermoplastic UL94V-0 Copper Alloy PCT / SMT: Phosphor Bronze Crimp: Brass Gold

At 25°C 2.8A max At 25°C 2.0A max 450V d.c. or a.c. peak 250V d.c. or a.c. peak 600V d.c. or a.c. peak  $20 \text{ m}\Omega \text{ max}$ 25 mΩ max

>1 G $\Omega$  min at 500V d.c.

# **Keyway polarisation points**

3 polarising points on each component prevent mis-mating.

## Packaged in Tape & Reel

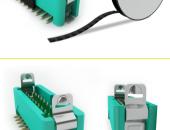
Packed in industry standard tape & reel packaging for automated assembly and also available as cut strips of 10 pieces.

#### **Combined Latching & PCB** retention system

Optional latches allow simple and fast de-latching and require no special tooling. Solder tabs for SMT and barbs for PC Tail versions ensuring retention to the PCB.

# Potting Wall

Cable connectors feature a rear potting wall adding an extra level of strain relief.





Durability: 1000 operations Mating forces (per contact pair): Insertion force: 2.8N max Withdrawal force: 0.2N min Contact retention in moulding: 6N min

# : Environmental

Environmental classification: 65/150/96 hours at 95% RH Operational temperature: - 65°C to 150°C \* Vibration sensitivity: 10Hz to 2000Hz, 1.5mm, 198 mm/s<sup>2</sup> (20G). duration 2h

- \* Bump severity:
- \* Shock severity:
- \* Acceleration severity:

\* Tested with latched connectors

All preferred sizes of this range are held in stock. Check www.harwin.com for availability.

### Four Finger Bervllium **Copper Contact**

Unique patent pending high-reliability contact design ensures signal integrity under extremes of bump, vibration and shock.

### Pre-assembled cable configurations

Cable connectors available in a variety of layouts featuring male and female single and double ended in a variety of standard lengths.

## No. 1 Position identified

Housings are clearly marked with identifier for fast visual inspection.

390m/s<sup>2</sup> (40G), 4000± 10 bumps

981m/s<sup>2</sup> (100G) for 6ms

490m/s<sup>2</sup> (50G)



#### **Environmentally Friendly** Materials

Mouldings are manufactured from halogen & Red Phosphorus free, glass-filled thermoplastic, an environmentally friendly material. All G125 connectors are RoHS compliant.

