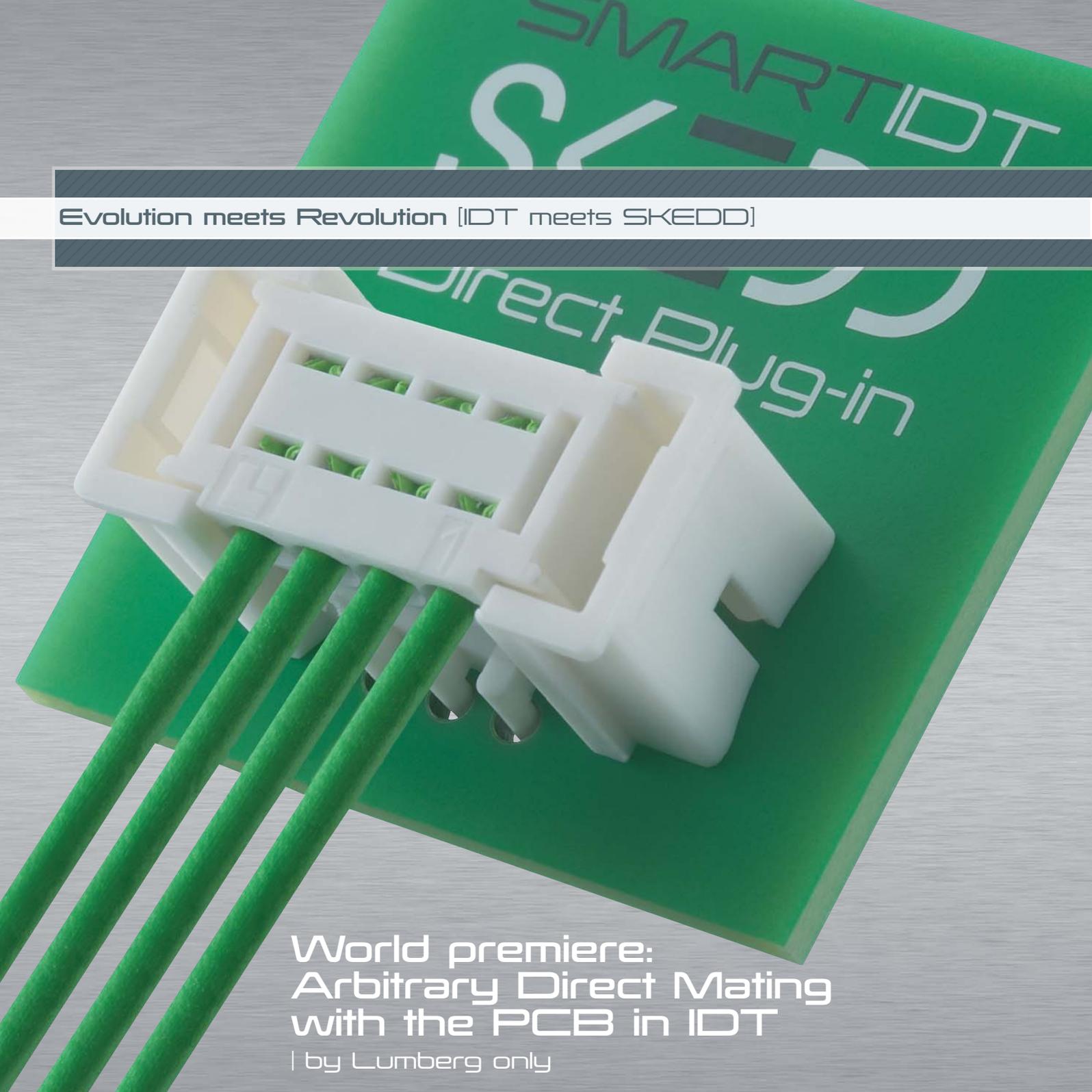


SMARTIDT
SKEDD
Direct Plug-in



Evolution meets Revolution [IDT meets SKEDD]

World premiere:
Arbitrary Direct Mating
with the PCB in IDT

| by Lumberg only

Evolution meets revolution: While direct contacting to the edge of the printed circuit board with RAST connectors is one of our domains, we are now introducing a totally new type of connectors for our free program: reversible direct connectors that mate anywhere on the PCB using tried and tested insulation displacement technology.

SKEDD makes this possible. The individual contact comprises two contact tongues which, when inserted into plated-through holes in the PCB, retract evenly. The contact pressure forces from the two tongues then create a solderless, steadfast mechanical-electrical connection inside the plated-through hole.

Connectors can be mated and locked without tools, for total convenience when mounting entire sub-assemblies. This enables completely new designs since they can be used anywhere, e.g. right in the middle of a PCB, or on the reverse, too. Here, reversible mating even facilitates for the first time the simple exchange of components during, for example, servicing. In conjunction with the established insulation displacement technology which supports all advantages in automated cable assembly and consequently, the convenient production of large quantities, our unique combo for your ideas anywhere on the PCB is really smart – or simply: smart SKEDD.





New Generation [IDT meets SKEDD]

**Superior
Benefit**
| by Lumberg



SmartSKEDD



7335

SmartSKEDD connector, direct mating, insulation displacement technology, with keying, with positioning spigots and locking on printed circuit board pitch 2.5 mm



7335

POLES	3-11
TEMPERATURE RANGE	-40 °C/+130 °C
MATERIALS	
Insulating body ¹	PBT, halogen-free, V0 acc. to UL 94
Hood ¹	PBT, halogen-free, V0 acc. to UL 94
Contact spring	CuSn, tin-plated

MECHANICAL DATA

Insertion force/contact ²	≤ 2 N
Withdrawal force/contact ²	≥ 1 N
Retaining force/lock	≥ 40 N
Mating with	printed circuit board 1.6 ± 0.14 mm

CONNECTABLE CONDUCTORS INSULATION DISPLACEMENT TERMINAL

Section ³	0.22-0.38 mm ²
Insulation diameter	≤ 1.6 mm

ELECTRICAL DATA

Contact resistance	≤ 5 mΩ
Rated current	4 A at T _{amb} 85 °C
Rated voltage ⁴	50 V AC
Material group ⁴	I (IEC)/0 (UL) (CTI ≥ 600)
Creepage distance	0.6 mm
Clearance	0.6 mm
Insulation resistance	> 10 GΩ

¹ Material halogen-free, GWFI 850°C (0.40 mm), GWIT 775°C (0.40 mm)

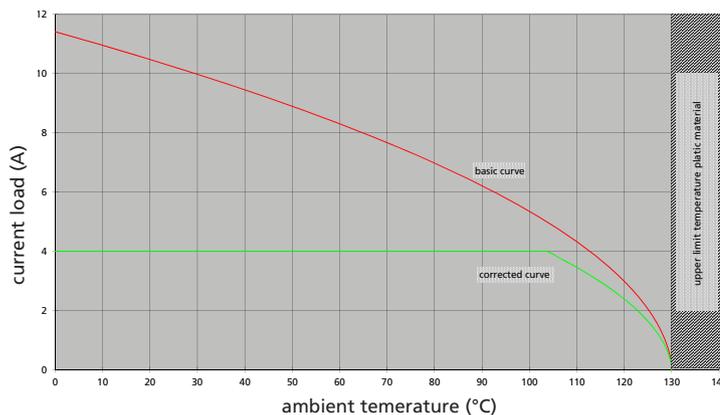
² Via diameter Ø 1.6 mm +0.09/-0.06 according to IEC/EN/DIN EN 60352-5

³ Cable construction and approved cables on request

⁴ Acc. to IEC 60664/DIN EN 60664/CTI, UL-Classification acc. ANSI/UL 746A

Derating Curve 7335

4 pole with wire cross section 0.38 mm², mated on FR4 70 µm Cu





Advantages [IDT meets SKEDD]

“IDT over SKEDD” – so much more than just a superior combination for a genuine connector with, e.g. a 2.5 or 5 mm pitch.

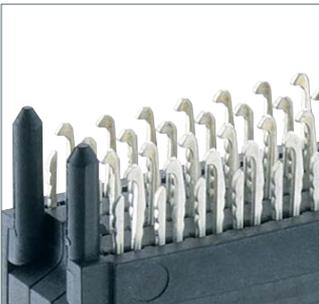
This new technology unveils a superior benefit also for your individual components. Whether board-to-board, wire-to-board or component-to-board – direct plug-in and plug-out connections anywhere on the PCB, e.g. in the middle or back-side of a PCB, are a novelty.

Advantages „IDT over SKEDD“

■ Direct mating

Cost savings of material and process/benefits:

- One counterpart less:
 - less installation space and weight
- No longer required:
 - one electrical interface
 - one contact resistance
 - one potential source of defects
- One mounting process less
- One press-fit or soldering process less:
 - no thermal stress for the PCB
 - no add-ons as required for press-fit with its high insertion forces
- No added technical requirements for the FR4 PCB
- No added technical requirements for the approved cables

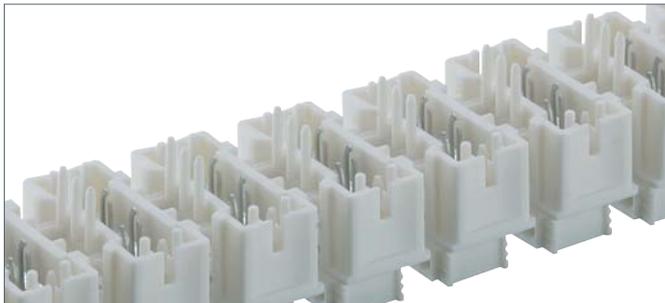


■ Reversible

- Designed for a minimum 5 mating cycles
- No tools required
 - easy manual connector plug-in and plug-out
- Easy exchange of complete components possible, e.g. for maintenance and servicing
- Disconnect feature supports sustainable recycling

■ Positioning

- Total arbitrary mating possible: anywhere, also on the reverse of a printed circuit board
 - new design possibilities for applications, e.g. a PCB can be used for different device models if all holes are arranged for SKEDD accordingly
 - if a PCB surface is fitted to capacity with components, the connector can mate on the reverse
- Customized for board-to-board, wire-to-board, component-to-board applications



■ IDT

- Rigid, flexible and flat ribbon cables possible
- Cable harnesses can be pre-assembled through highly-automated machinery
- Assembler can rely on over 30 years of know how in proven IDT assembly
- Cable assembly can be processed on proven knuckle joint presses, semi-automatic machines and fully-automatic machines
 - zero-defect quality during cable assembly
 - assembly machines have testing stations which eliminate all defects
 - highly-efficient cable assembly for any batch size

■ Casing

- Connector with locking pin and safety cover
 - durable secure retention on the printed circuit board
- Keying options via casing
 - keying option: zero-defect quality for device assembly
 - protection against mismatching prevents accidental mix-ups and faulty connections
- Halogen-free material
- Glow wire resistant

Lumberg

passion for connections

www.lumberg.com · automotive@lumberg.com