# MD

## Intelligent interface HSD/USB Type-C

#### **Our USPs**

- Shortest available HSD USB Type-C interface module on the market
- System solution
- Manufacturing processes according to automotive quality standards
- Product validation according to customer-specific requirements
- Validation tests performed in accredited MD test lab



### **Your Advantages**

- Package-optimized direct connector with integrated electronics (Type-C Logic)
  - » same package size as USB Type-A direct connector
- Use of existing hardware possible\*
- No change of the wire harness necessary\*
  use of established components
- > Compatible with HSD USB Type-A direct connector

#### **Technical Information**

#### **Electrical**

Input supply voltage V<sub>bus-In</sub> 4.75 V up to 5.50 V Output current up to 3.0 A max.

(depends on input source)

Output voltage V<sub>bus</sub> depends on

(Type-C) input source (V<sub>bus-In</sub>)

#### Mechanical

Housing dimensions see drawing

Coding according to customer

requirements

#### **Environmental**

Operating temperature

-40 °C up to +80 °C

range

### Requirements

USB Type-C customer interface with USB 2.0 functionality and HSD connection

## **Applications**

- USB Type-C customer interface
- > Rear seat entertainment

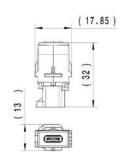
## **Protocols & Signals**

#### Data

USB 2.0 High-Speed

#### Charging

- > Legacy charging profiles BC1.2 DCP
- Apple charging profile (2.4 A)
- > 1.2 V Divider Mode
- USB Type-C charging (5 V / 3 A)





<sup>\*</sup>In case of using HSD-based systems

## **MD** in a Nutshell



The C.A.S.E. megatrend describes the four essential future topics for the automotive industry: Connected, Autonomous, Shared & Service and Electric. Data plays a central role and drives the future of the automotive industry. Data is generated, transferred, merged and evaluated. We are experts in the transmission of the rapidly increasing data volumes and have developed the latest technological solutions for this future topic.

25

years experience in the automotive industry

**100 %** 

automotive



Supplier of products for over 350 car models from more than 60 OEMs



Volume supplier – over 160 million products in more than 20,000 variants annually



Global production- & sales network in NAFTA, Europe and APAC



Stable ownership structure



Worldwide leading company for data transmission solutions in vehicles



Approx. **5,000 employees** worldwide



Accredited in-house test laboratory