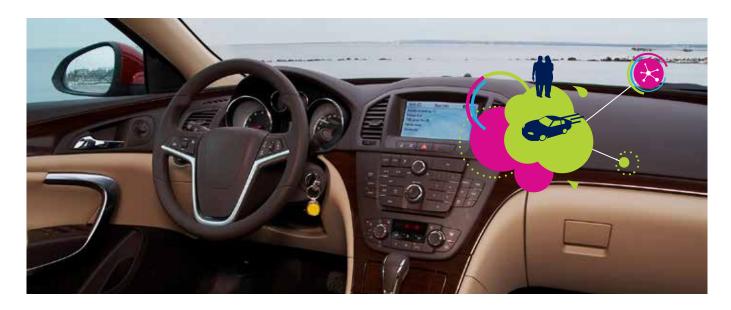


BroadR-Reach® integrated

Low pass filter and ESD protection



OPEN Alliance -compliant automotive-grade integrated low-pass filter and ESD protection for BroadR-Reach® interfaces

The EMIF02-02OABRY is an AEC-Q101-qualified ASIP integrating a dual-line EMI filter and dual-line high-speed ESD protection.

While previous filtering solutions were 30 mm²,

the EMIF02-02OABRY supports the same functions in only 9 mm².

With support for Automated Optical Inspection thanks to its wettable flanks, this highly integrated solution offers features such as a return loss of -20 dB up to 60 MHz, 1% component matching and 15 kV robustness over a wide temperature range (-40 to 125 °C).

KEY APPLICATION

- Advanced Driver Assistance System (rear view camera, bird's eye view vision, etc.)
- Infotainment (in-seat multimedia screen, central display, cameras, etc.)
- Industrial applications (factory automation)

KEY FEATURES

- AEC-Q101 compliant
- · Dual-line device
- ISO 10605 compliant: 15 kV (contact discharge)
- Attenuation profile compliant with OPEN Alliance requirements from -40 to 125 °C
- Return loss at 60 MHz: -20 dB
- Smallest solution on the market in a 3 x 3 mm wettable flank QFN package

ELECTRICAL PARAMETERS

| Parameter | Conditions | Value | Unit |
|---------------------------------------|--|-------|------|
| V _{PP} | ISO 10605 (330 Ω / 330 pF) External pins (pins 1 and 3) | 15 | kV |
| S _{DD11} & S _{DD22} | from 10 MHz to 60 MHz, Tj = -40 °C to 125 °C | -20 | dB |
| S _{DC21} & S _{CD21} | from 10 MHz to 1 GHz, Tj = -40 °C to 125 °C | -55 | dB |

WIRING

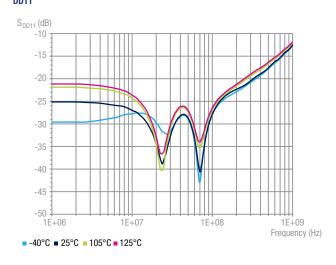
| | СТ | 6 | |
|-------------------|------------------|----------|----|
| S _{DD11} | 22 BRY 7 BYWW | 5 S DD22 | Tx |
| | | 4 | |

PACKAGE DRAWING

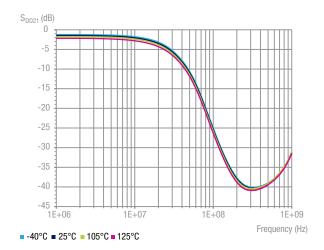


6-lead QFN 3 x 3 x 1 mm 1.1 µm pitch

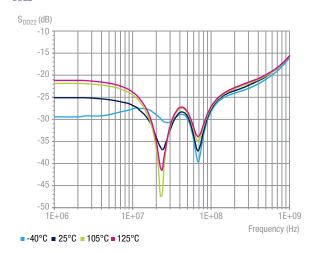
S_{DD11} VERSUS TEMPERATURE



\mathbf{S}_{DD21} VERSUS TEMPERATURE



$S_{\tiny{DD22}}$ VERSUS TEMPERATURE





www.st.com/broadr-reach-filter-fl



