



SAW components

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## Extremely low-profile band rejection filters for mobile TV

TDK-EPC, a group company of the TDK Corporation, presents a low-profile band rejection filter from EPCOS for mobile TV under the Japanese ISDB-T set of digital TV standard. In a miniature 1411 SMD package (1.4 x 1.1 x 0.4 mm<sup>3</sup>) the new B8740 features one of the world's lowest package height. This allows manufacturers to integrate the filter into compact mobile phones that must support an increasing number of services and functions, including

mobile telephony and broadcast services.

Thanks to its excellent electrical characteristics, the B8740 offers a high selectivity of the channels used. The usable bandwidth for TV reception is 300 MHz in the passband between 470 and 770 MHz. In this range the new filter achieves a low maximum insertion loss of 2.7 dB. Its group delay ripple is 6 ns.

The rejection frequencies are 824 to 840 MHz and 898 to 925 MHz. With these characteristics the B8740 is very well suited for undisturbed mobile TV reception.

### Glossary

- ISDB-T: designates terrestrial digital television under the Japanese ISDB (Integrated Services Digital Broadcasting) standard. The 1seg service under ISDB-T is specialized for mobile reception in TV bands on mobile phones, notebook computers and in vehicles with a minimized data rate.

### Main applications

- TV reception in mobile phones under the Japanese ISDB-T standard for digital TV.

### Main features and benefits

- Low package height of 0.45 mm (max.)
- Low insertion loss of 2.7 dB (max.)
- Low group delay ripple
- RoHS-compatible

### Key data

Case size / Series	1411 / B8740
Max. insertion loss at 470 to 710 MHz [dB]	1.7
Max. insertion loss at 710 to 770 MHz [dB]	2.7
Rejection frequencies [MHz]	824 to 840 / 898 to 925
Group delay ripple (p-p) at 470 to 770 MHz [ns]	6