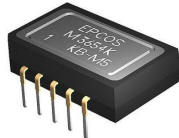


## SAW Components

## Material Data Sheet

|                            |                    |  |
|----------------------------|--------------------|--|
| <b>Product Family Name</b> | SAW Filters        |  |
|                            | Plastic technology |  |
| <b>Date</b>                | 24.10.2006         |  |
| <b>Version</b>             | 02                 |  |

| Construction Element            | Material group | Materials                   | CAS<br>if applicable | mass [weight-%] |         |        | Sum<br>[%]  | Traces |
|---------------------------------|----------------|-----------------------------|----------------------|-----------------|---------|--------|-------------|--------|
|                                 |                |                             |                      | min             | typical | max    |             |        |
| <b>Active Part</b>              |                |                             |                      |                 |         |        | <b>5.5</b>  |        |
|                                 | Inorganic      | LiTaO3                      | 12031-66-2           |                 | 5.0     |        |             |        |
|                                 | Metal          | Al                          | 7429-90-5            |                 | 0.1     |        |             |        |
|                                 | Polymer        | Epoxide                     | 25928-94-3           |                 | 0.1     |        |             |        |
|                                 | Inorganic      | BaSO4                       | 7727-43-7            |                 | 0.3     |        |             |        |
| <b>Encapsulation</b>            |                |                             |                      |                 |         |        | <b>94.1</b> |        |
| Leadframe                       | Alloy          | Cu                          | 7440-50-8            |                 | 15.5    |        |             |        |
|                                 |                | Fe                          | 7439-89-6            |                 | 0.3     |        |             |        |
|                                 |                | Ag                          | 7440-22-4            |                 | 0.2     |        |             |        |
| Molding                         | Inorganic      | Calcium Carbonate           | 471-34-1             |                 | 24.6    |        |             |        |
|                                 | Inorganic      | Carbon Black                |                      |                 | 4,3     |        |             |        |
|                                 | Inorganic      | Fiberglass                  | 65997-17-3           |                 | 24.6    |        |             |        |
|                                 | Polymer        | Polyphenylene Sulfide (PPS) | 26125-40-6           |                 | 24.6    |        |             |        |
| <b>Termination / Conductors</b> |                |                             |                      |                 |         |        | <b>0.3</b>  |        |
|                                 | Metal          | Ag                          | 7440-22-4            |                 | 0.2     |        |             |        |
|                                 | Metal          | Sn                          | 7440-31-5            |                 | 0.1     |        |             |        |
| <b>Internal Connection</b>      |                |                             |                      |                 |         |        | <b>0,1</b>  |        |
|                                 | Metal          | Au                          | 7440-57-5            |                 | 0.1     |        |             |        |
|                                 |                |                             |                      |                 |         | total: | <b>100</b>  |        |

| Package code:   | sizes: L x W x H [mm] | Approx. weight [mg] |
|-----------------|-----------------------|---------------------|
| B39*-M331*-K100 | DIP10K 18.5x11.5x4.9  | 1740                |
| B39*-N3310-K100 | DIP10K 18.5x11.5x4.9  | 1740                |

Range of ordering code (\* - wildcard for all products within this range)

|                    |                                     |                           |
|--------------------|-------------------------------------|---------------------------|
| <b>Company:</b>    | EPCOS AG                            | <b>Important remarks:</b> |
| <b>Contact:</b>    | Peter Geschka, Dep. SAW COM PT RQ   |                           |
| <b>Phone / Fax</b> | +49 89 636 22188 / +49 89 636 27280 |                           |
| <b>Mail</b>        | mailto:peter.geschka@epcos.com      |                           |

**The component is RoHS-compatible**, what means compatible with the requirements of the directives listed below and with the requirements of the provisions which will result from transformation of the directives into national law to the extent such provisions reflect the Regulations.

- 1) Traces are product parts, substances etc. that are below a percent tage of 0.1 % by weight, if not otherwise regulated (see note no. 2).
- 2) A list of the (legal) "... restrictions on substances ..." or materials is available at internet address of the EICTA organisation (C4E List)
- 3) All statements herein are based on our present knowledge. If our products are used properly, there are no risks to human beings and/or the environment.



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Electronic Parts and Components

Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("Directive 2002/95/EC");  
Commission Decision of 18 August 2005 amending Directive 2002/95/EC (2005/618/EC);  
Commission Decision of 13 October 2005, of 21 October 2005, of 21 February 2006 amending the Annex to Directive 2002/95/EC (2005/717/EC; 2005/747/EC, 2006/310/EC).

