

GSM/GPRS/EDGE Handset SAW Filters Feature Small Size

New SAW filters offer performance and reliability in a smaller package, enabling space-saving designs required for today's wireless handsets

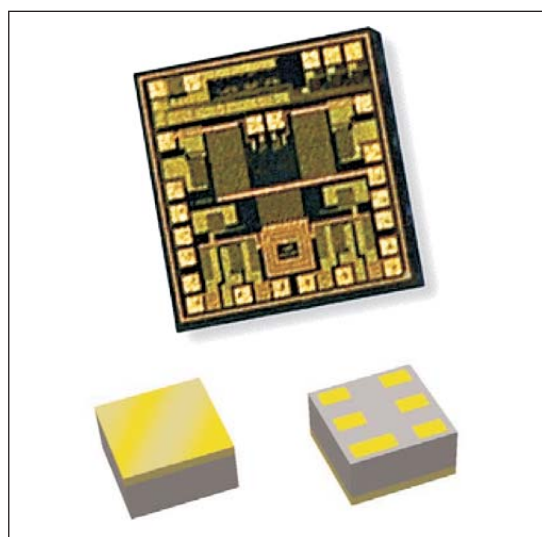
A new family of GSM / GPRS / EDGE SAW filters has been introduced by Tri-Quint Semiconductor, Inc. The new filters are extremely small size (1.5 × 1.5 × 0.76 mm), the

smallest offered by TriQuint in mass production. This new filter family is 20 percent smaller than the 2.0 × 1.4 mm SAWs commonly used by global handset makers. This size advantage allows phone designers to free-up board space in next generation designs to accommodate additional features and functions.

Performance

Insertion loss is a key factor in evaluating SAW filter performance as it directly affects the overall noise figure—one of the most critical system level parameters for GSM phones. The insertion loss of TriQuint's new 1.5 × 1.5 mm RF SAWs is considered among the best by today's phone designers: from 1.2 to 1.5 dB (typical) for the various units.

TriQuint's new quad-band GSM RF filters are designed for high-reliability while maintaining cost effectiveness. Reliability is assured by full hermeticity within the SAW packages; TriQuint does not use non-hermetic processes to reduce costs. Hermeticity is important for SAW filters to ensure consistent



and reliable operation of the transducer material on the surface of the piezoelectric substrate. Manufacturing processes that use less ceramic material than other designs, allows the company to offer technically superior, cost effective products.

TriQuint's new 1.5 × 1.5 mm GSM/GPRS/EDGE SAW filters are in mass production today. TriQuint also offers 2-in-1 filter products with the same electrical performance as individual 1.5 × 1.5 mm RF SAW filters. Data sheets, samples, demo boards, application notes and application team technical support on these new SAW filters are available by contacting TriQuint's SAW filter group—Tel: 407-886-8860; E-mail: dking@sawtek.com

Part No.	Application
856441	GSM850
856387	GSM900
856409	DCS
856417	PCS

SAW filter part numbers and applications.

TriQuint Semiconductor, Inc.
 2300 NE Brookwood Parkway
 Hillsboro, OR 97124
 Tel: 503-615-9000; Fax: 503-615-8900
www.triquint.com

HFeLink 301