

Industry's Smallest Strobe Control IGBTs for Mobile Phone Cameras

May 12 2005

Renesas Technology Corp. today announced the CY25CAH-8F (2.5 V drive) and CY25CAJ-8F (4.0 V drive) strobe control IGBTs for mobile phone cameras, featuring the industry's smallest size of 3.0 mm x 4.8 mm and 0.95 mm (max.) thick . Sample shipments will begin in Japan on May 12, 2005.

Major features of these two new products are as follows.

(1) Industry's smallest size

Use of a VSON-8 (Renesas package code : Very thin Small Outline No lead package 8-pin) package with shorter leads than the current TSSOP-8 package has resulted in the industry's smallest mounting area (3.0 mm x 4.8 mm (typ.)) and cubic capacity for a strobe control IGBT. Mounting area and thickness have been reduced by approximately 25% and 14% respectively compared with Renesas' current TSSOP8 package CY25BAH-8F and CY25BAJ-8F, enabling mobile phones to be made slimmer.

(2) Complete Pb-free construction

Complete Pb-free construction, including internal solder, makes these new IGBTs environment-friendly.

In many power devices handling large currents, high-melting-point solder containing lead is used internally to ensure high reliability.

Renesas Technology already mass-produces TSSOP-8 package products offering complete Pb-free construction without compromising reliability, and has now used this technology to achieve complete Pb-free

construction of small devices while maintaining the same high level of reliability.

Product Background

As the pixel counts of mobile phone cameras continue to increase, higher-quality photographic images are being demanded. With the need for auxiliary lighting for indoor photography and red-eye suppression, in particular, the amount of light from conventional LEDs is large, and there is a growing trend toward xenon flash used in strobes for digital still cameras (DSCs) and the like.

As this xenon flash handles large currents in excess of 100 A, an IGBT is used for strobe control, but in view of the compact size of mobile phones, the same kind of small, thin design is required as for other parts.

To meet this need, Renesas Technology has employed the design and mounting techniques established for DSC strobe control IGBTs in developing the greatly miniaturized CY25CAH-8F and CY25CAJ-8F for mobile phone use.

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