

E Series

Extended Life Resin Blades for QFN, Ceramic & Quartz



Our revolutionary, new E Series resin blade formula exhibits wear resistance that is significantly better than standard resin matrixes, making it an excellent choice for the toughest QFN, hard alumina, ceramic (LTCC) and quartz applications.

Reduce Cost...Increase Profitability

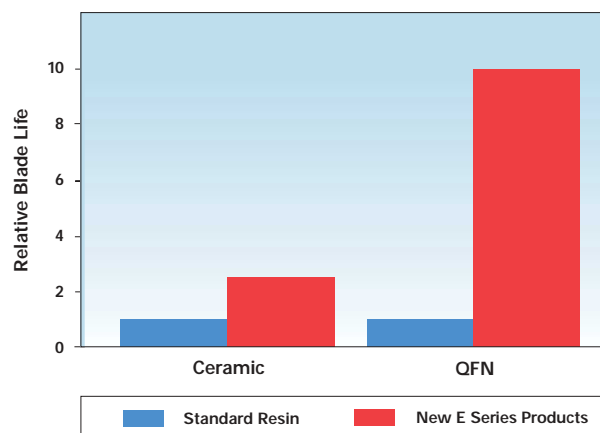
ADT's E Series Blades provide the lowest cost versus cut length ratio of any dicing blades in the industry. With an extended blade life up to ten times longer than most standard resin blades, E Series Blades will pay immediate dividends through reduced replacement blade maintenance costs and increased throughput. Designed to withstand the wear and tear associated with some of the industry's most severe dicing challenges, E Series blades are optimized to provide excellent cut quality when dicing hard and brittle ceramic (LTCC) and quartz (SAW devices), as well as non-homogenous QFN and metal leadframe devices.



While longer blade life has been an important goal in QFN and metal leadframe dicing applications, cut quality cannot be compromised. In the QFN applications shown above, E Series blades cut through encapsulation and soft, copper lead material without burrs or smearing. Optimization of grit size and dicing parameters maintain this level of quality and also prevent loading of the blade with copper residue.



Improved Blade Life



The chart above illustrates the relative blade life of our new E Series resin blades vs. standard resin formulas when dicing ceramic and QFN materials. In the case of the QFN sample, E Series blades were up to 10 times more resistant to wear, lasting nearly 10 times as long.

- Longer Blade Life Compared to Standard Resin
- Matrixes Tailored to Desired Cut Quality
- Reduced Cost of Ownership
- Higher Throughput

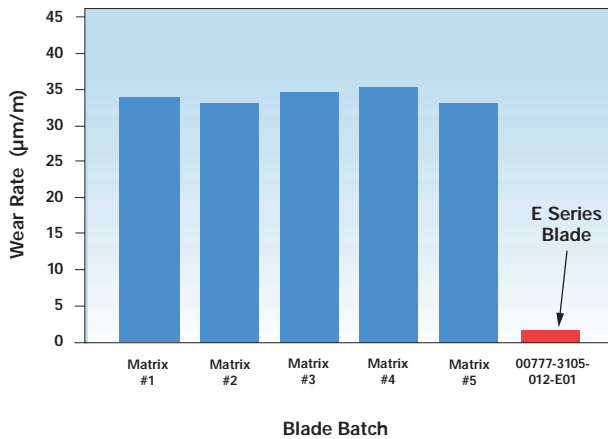


E Series

Extended Life Resin Blades for QFN, Ceramic & Quartz

Wear Rate Comparison: QFN

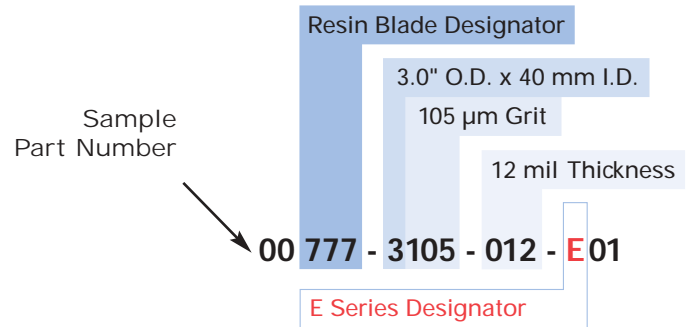
E Series Blades vs. Standard Resin Blades,
Material: QFN (Half-etched)



The chart above illustrates the dramatic reduction in the wear rate of the E Series blade compared to standard resin blades when dicing half-etched, QFN material. While the standard formula shows consistent wear rates between 30-35 µm/m, the E Series blades exhibit wear rates of approximately 2-3 µm/m.

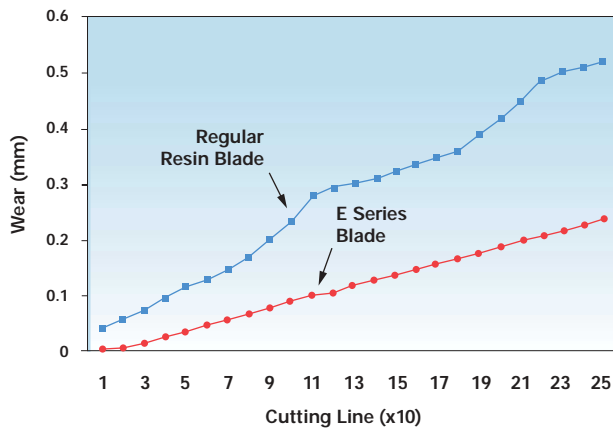
Ordering Information

E Series dicing blades are available in the same thicknesses and dimensions as all other ADT resin blades. When ordering, use the E Series Designator as shown in the sample below. Consult your sales representative for additional information.

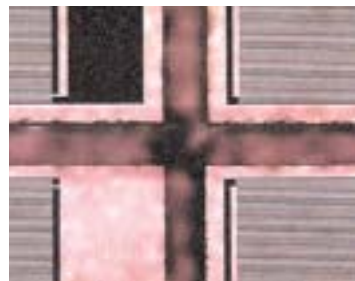


Wear Rate Comparison: Quartz

E Series Blades vs. Standard Resin Blades,
Material: Quartz (SAW Devices)



When dicing quartz SAW devices, the E Series blades show extremely linear wear that is about half the amount one could expect when using a standard resin blade over the same linear distance.



In the quartz application shown at left, E Series blades maintain chipping within allowable limits.

BITA ELEKTRONIK SVENSKA AB
POB 3434, SE-10368 STOCKHOLM, Sweden

Ph. +46 (8) 319000, Fx. +46 (8) 326064, e-mail: info@bita.se. www.bita.se

©2003 Advanced Dicing Technologies. Specifications may change without notice. Revision 09/03

