

**The VeriCode Symbol provides higher density data storage than the Data Matrix code.**

The Data Matrix code has many of the same elements as the VeriCode (in fact, users of Data Matrix code may wish to take a close look at Veritec's patent claims). However, Data Matrix code does not reach Veritec's goal of maximum data density. As an example, for LCD panel marking application, the VeriCode symbol is 1/30th the size of the Data Matrix symbol.

VeriCode Symbol



Data Matrix



The chart shows a side-by-side calculation of VeriCode symbol size vs. Data Matrix symbol size, using identical matrix cell sizes.

Item	VeriCode	Data Matrix	Notes/Reference
Symbol size 10 digit alphanumeric LCD symbol	1.4 mm	1.4 mm	Assuming 87.5 micron cell size 25% EDAC - VeriCode and Data Matrix
Recommended quiet zone	0.175 mm	4.3 mm	The VeriCode symbol requires a quiet zone of 2 cells on each side. The SEMI T8-0698 (dated April 2000) specifications for marking Data Matrix symbols on LCD glass requires a 2 mm quiet zone on each side.
Effective size of symbol, including quiet zone	1.75 mm	10 mm	Per Veritec recommendation and SEMI T8-0698 specification

Even though the Data Matrix symbol has the same theoretical data density as the VeriCode symbol, the VeriCode symbol provides a much greater effective data density. The reason for this significant advantage is that the four solid borders of the VeriCode symbol permit it to be printed as close as 0.175 mm to active elements (or other artwork on the LCD panel), but still be distinguished from the elements, permitting the symbol to be decoded. In contrast, the SEMI specification requires that the Data Matrix symbol be placed in a 10 mm viewing zone, at least 4.5 mm away from the active area of the LCD panel.