Abstract

GROUP III NITRIDE WHITE LIGHT EMITTING DIODE

A white-light emitting diode comprises an n-type semiconductor layer, one or more quantum well structures formed over the n-type semiconductor layer, a p-type semiconductor layer formed on the quantum well structure, a first electrode formed on the p-type semiconductor, and a second electrode formed on at least a portion of the n-type semiconductor layer. Each quantum well structure includes an $In_xGa_{1-x}N$ quantum well layer, an $In_yGa_{1-y}N$ barrier layer ($x>0.3$ or $x=0.3$), and $In_zGa_{1-z}N$ quantum dots, where x<Y<Z&LE;1.< TD>

Figure 1