



# Bipolar NPN Bare Die – BTN165

## Part Description

The BTN165 is a general purpose NPN Darlington Transistor supplied in bare die form and is a direct replacement for the Central Semiconductor CMPTA29.

## Key Parameters:

- VCBO = 100V
- VCEO = 100V
- VEBO = 12V
- HFE = 10000 @ VCE = 5V, IC = 100mA
- VCE SAT = 1.5V @ IC = 0.1A, IB = 0.1mA
- fT = 125MHz @ VCE = 5V, IE = 0A
- COBO = 8pF @ VCB = 10V

## Features

These high reliability transistors are suited for assembly on thick & thin-film hybrid circuits with high mechanical quality & Gold back metallization. Electrically they are characterized over temperature & supplied in multiple hirel grade options.

## Die Size (Unawn)

680µm X 680µm, 27 Mils X 27 Mils

This is a shortform datasheet only

For the full datasheet

Please contact [sales@siliconsupplies.com](mailto:sales@siliconsupplies.com)

**DISCLAIMER:** The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Silicon Supplies Ltd hereby disclaims any and all warranties and liabilities of any kind.

**LIFE SUPPORT POLICY:** Silicon Supplies Ltd components may be used in life support devices or systems only with the express written approval of Silicon Supplies Ltd, if a failure of such components can reasonably be expected to cause the failure of that life support device or system or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.

