## **Temperature Range Definitions for Bourns® Inductive Components**

**Typical Operating Temperature** – The temperature at which specified electrical parameters are measured; also used for typical measurements found on the product data sheet.

**Operating Temperature Range** – The temperature range at which the part continues to operate, but with possible degradation of performance in some aspects while operating in this temperature range. When returned to its *Typical Operating Temperature*, no permanent damage to the part is detected.

Note for Special Applications (LAN, Automotive, etc.) – These products must function in compliance with the defined network s-parameters (insertion loss, return loss, cross talk, etc.), or those specified by the customer or standard. The designation, "Threshold Operating Temperature" will be defined as the temperature at which product performance still meets specifications when measured at the *Typical Operating Temperature*.

**Maximum Temperature** – Operating above this limit will increase the risk of irreparable damage to the part. This specification will be clearly defined as either an unpowered or powered condition, and the worst case factors should be assumed, i.e., the maximum current typically applied, the possible increase for self-heating, etc.

**Storage Temperature** – The range in which the part's condition can be maintained without any permanent damage to the part (as a whole), its constituent elements, or packaging.

Note – *Storage Temperature* may be lower than *Maximum Temperature* due to factors such as potential oxidation occurring from long-term storage or tape and reel packaging guidelines.

## **BOURNS**®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com