

## USB 2.0 - ESD & Overcurrent Protection

### Solution Products



MF-NSMF075-2



CG0603MLC-05LE

### Objective

Universal Serial Bus (USB) 2.0 ports provide up to 480 Mbps data transfer rates and 5 V power at up to 500 mA. As a hot-pluggable interface, it typically requires protection against ESD and short circuits. This solution provides this protection.

### Solution

- 1 Multifuse<sup>®</sup> PPTC: MF-NSMF075-2
- 3 ChipGuard<sup>®</sup> ESD Suppressors: CG0603MLC-05LE

### Compliance

- USB 2.0
- UL60950
- IEC 61000-4-2 Level 4 (8 kV / 15 kV)

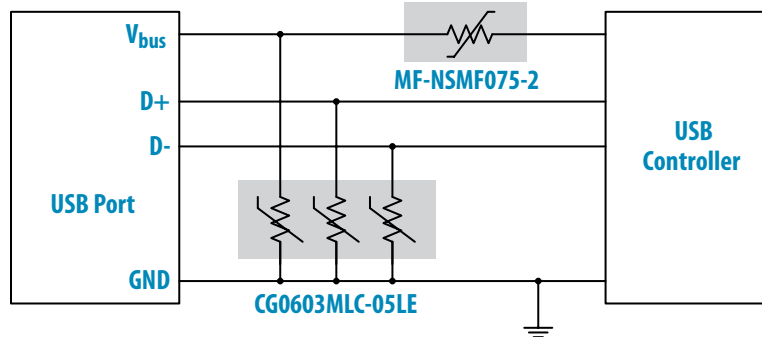
### Alternate Recommendations

*Other PortNote<sup>®</sup> Solutions:*

- USB: USB 3.0 - ESD & Overcurrent Protection

### Benefit

This solution provides USB 2.0 ports with compatible protection without impairing the transmission of power or data.



*The schematic above illustrates the application protection and does not constitute the complete circuit design. Customers should verify actual device performance in their specific applications.*

### Design Kit



PN-DESIGNKIT-3

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Bourns<sup>®</sup> PortNote<sup>®</sup> solutions provide protection recommendations for typical port threats.

For more information, go to:

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