

## Featured Products Bulletin

### CIRCUIT PROTECTION PRODUCTS



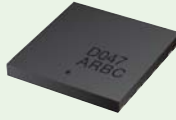
#### ADVANCE NOTICE

## Bourns Releases New Transient Current Suppressor (TCS™) High-Speed Protector Products

Riverside, California - TO BE RELEASED SEPTEMBER 7, 2012 - Bourns is pleased to announce the release of new TCS™ High-Speed Protectors, designed to provide superior protection for very high data rate differential lines. Bourns® TCS-DL Series helps protect Gigabit Ethernet (GbE) and VDSL applications against faults caused by short circuits, induction and lightning surges by limiting the maximum current to a safe level.

Bourns® TCS™ High-Speed Protectors are typically used in conjunction with low capacitance Transient Voltage Suppressor (TVS) devices to form an extremely low let-through energy barrier to excessive voltages or currents during surge events, which may damage high-speed, low voltage driver and receiver components.

The DL Series of Bourns® TCS™ High-Speed Protector products contain a dual, well-matched, low resistance, bidirectional and very high-speed Transient Current Suppressor (TCS™) device.

Specification		TCS-DL Series		
		 TCS-DL004-250-WH	 TCS-DL004-500-WH	 TCS-DL004-750-WH
Peak Impulse Voltage Withstand with Duration Less than 1 ms	V <sub>IMP</sub>	40 V		
Typical Current Required for the Device to Go from Operating State to Protected State	I <sub>IMP</sub>	375 mA	750 mA	1100 mA
Typical Series Resistance of the TCS™ Device	R <sub>ON</sub>	2.3 ohms	1.4 ohms	1.0 ohms
Resistance Matching Between Side A and Side B	R <sub>MATCH</sub>	±0.05 ohms	±0.03 ohms	±0.02 ohms

~ Continued on Page 2 ~

#### Features

- High-speed performance
- Superior overcurrent protection
- Bidirectional
- Low resistance
- Excellent channel to channel resistance matching
- Small SMT package
- RoHS compliant\* and halogen free\*\*

#### Applications

- VDSL and Ethernet ports
- Protection modules and dongles
- Process control equipment
- Data communications
- Test and measurement equipment

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

\*\* Bourns follows the prevailing definition of "halogen free" in the industry. Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

The Bourns® TCS™ High-Speed Protectors meet industry standard requirements such as RoHS\* and Pb Free solder reflow profiles. The devices are provided in space-saving, surface mount Dual, Flat, No-lead (DFN) packages.

The product data sheet with detailed specifications can be viewed on the Bourns website at [www.bourns.com](http://www.bourns.com).

If you have any questions, please contact our customer service teams in your region.