



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Bussmann TCP70 Series

70Vdc Telecom fuses



Product description

Designed to UL 248 and UL 248-14, the Bussmann TCP70 Series of telecommunication fuses withstand the wide variations in application environments while delivering reliable circuit protection.

The fuses have breaking characteristics similar to a circuit breaker while providing a much more economical solution.

- Halogen free, lead free, RoHS compliant
- Special design telecom circuit protection devices
- High inrush current withstanding capability reduces nuisance openings
- Fuseclip assembly method
- Rugged ceramic construction
- Excellent environmental integrity
- One time positive disconnect

Agency information

- cURus Recognized Guide JDXY2, JDXY8, File E19180

Part number system/ordering

BK1/ TCP70- 5 -R

- BK1/ = 1000 fuses packed in a cardboard carton
- TCP70- = Fuse series
- 5 = Amp rating
- -R = RoHS compliant

Applications

- Telecommunication DC voltage circuits

Bussmann
by **EAT•N**



The Bussmann brand of circuit protection products (formerly of the Bussmann Division of Cooper Industries) is now part of Eaton's Electrical Group, Electronics Division.

Bussmann is now part of Eaton
Same great products plus even more.

Product specifications

Part Number	Voltage Rating (Vdc)	Current Rating (Amps)	Interrupting Rating (Amps) ¹	Typical Cold Resistance (mΩ) ²	Typical Voltage Drop (mV)	Typical Pre-Arcing I ² t (A ² s) ³	Fuse Marking Color (text)
TCP70-5-R	70	5	2500	34.5	235	50	Red
TCP70-6-R	70	6	2500	20.1	165	48	Purple
TCP70-10-R	70	10	2500	10.5	148	165	Green
TCP70-15-R	70	15	2500	6.3	138	460	Blue
TCP70-30-R	70	30	2500	2.05	84	4400	Black

1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source).

2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 20°C.

3. Typical Pre-arcing I²t (A²s) are measured at 10I_n and rated current.

Electrical characteristics

% of Amp Rating	Opening Time
100%	4 hours minimum
150%	<60 min
200%	<2 min

Environmental Data

- Operating temperature range: -55°C to +125°C (see derating curve)
- Altitude: <2000m above sea level
- Humidity: 90% at 20°C, 50% at 40°C non-condensing

Reliability

- Thermal shock test — MIL-STD-202G Method 107G air-to-air, 100 cycles
- Temperature cycling — JESD22 Method A104, Condition B, 100 cycles
- Mechanical shock test — MIL-STD-002 Method 213B, 50g
- Mechanical vibration test — MIL-STD-202, Method 204D, condition D, 20g, 10-500Hz.

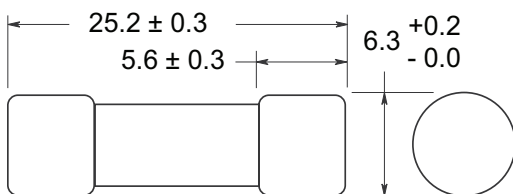
Packaging

- 1000 fuses packed into a cardboard carton. Order with part number prefix BK1/. E.g., BK1/TCP70-5-R

Recommended PCB fuseclips

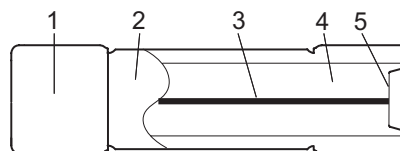
- 1Axxxx Series for 6.3mm (1/4") fuses - see data sheet # 2131.

Dimensions - mm



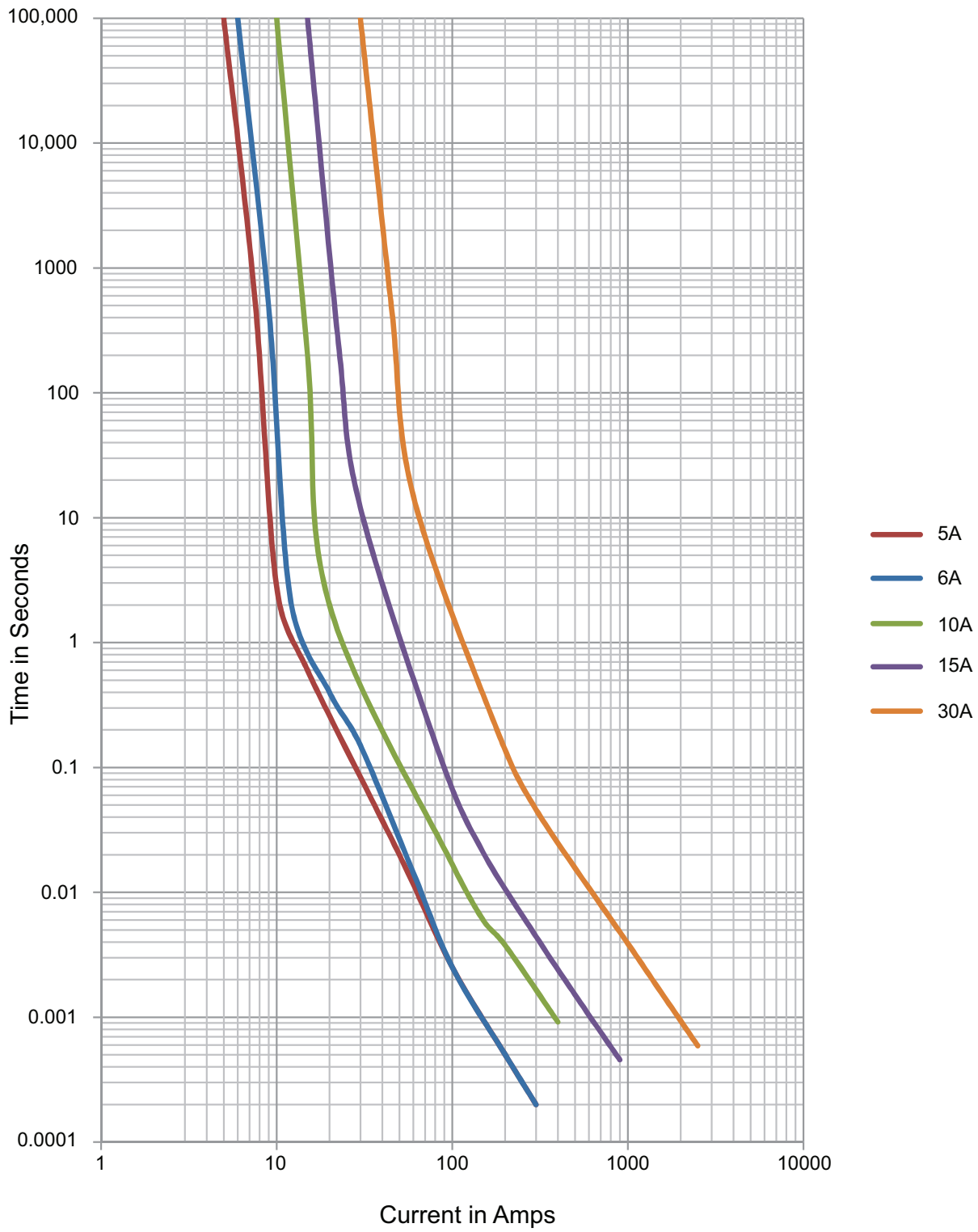
Construction

Not to scale

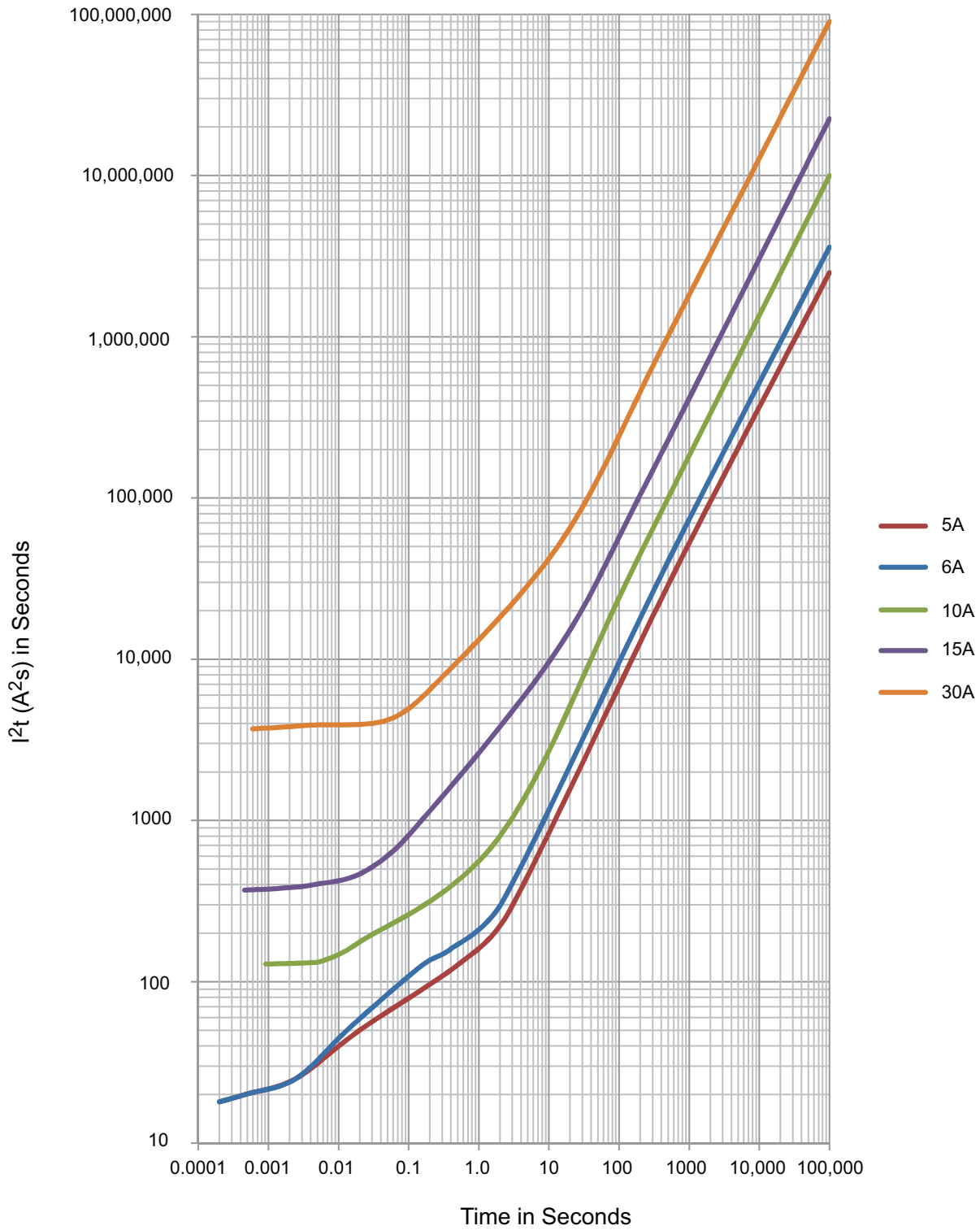


1. Tin-plated copper cap
2. Ceramic tube
3. Fuse element wire
4. Filler
5. Eyelet

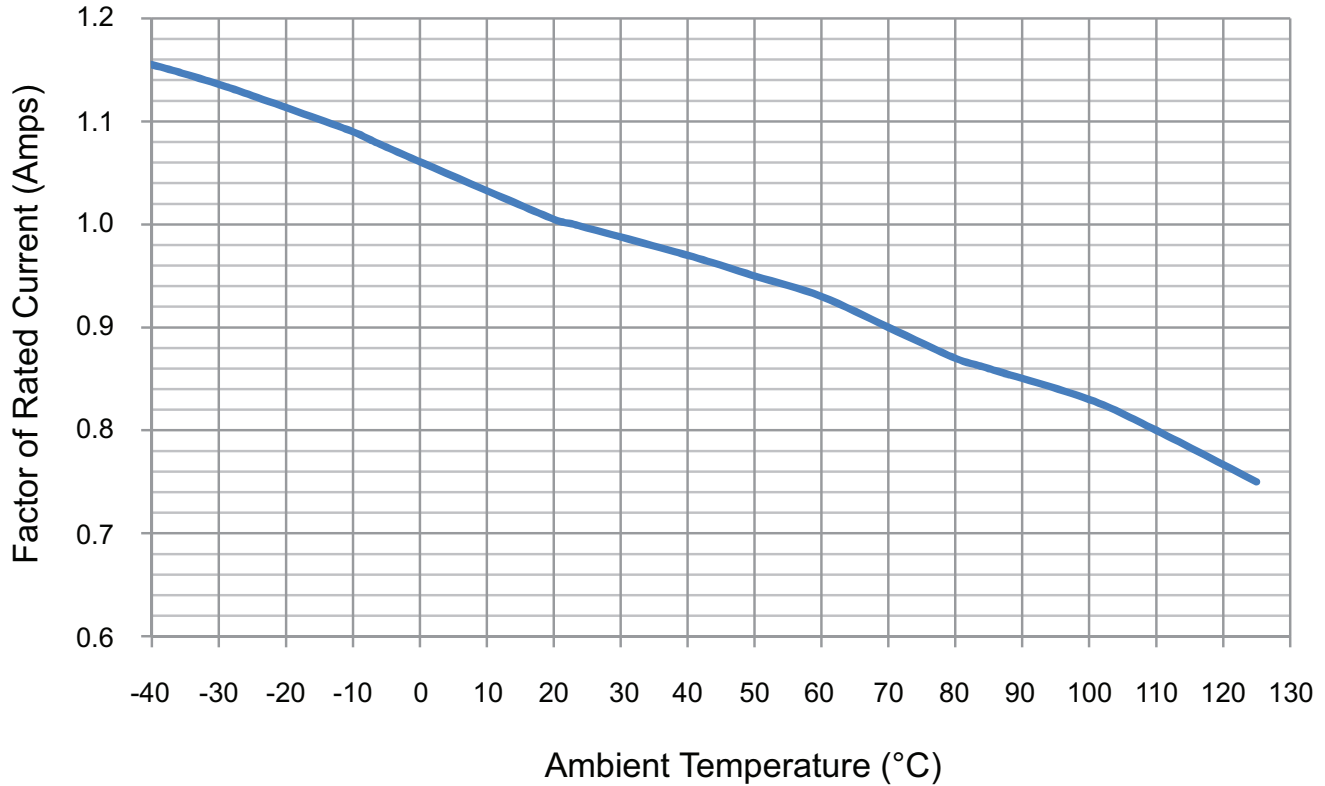
Time-current curves



I²t (A²s) Curves



Thermal derating curve



North America

Eaton's Electrical Group
Electronics Division
1225 Broken Sound Parkway NW
Suite F
Boca Raton, FL 33487-3533
Tel: 1-561-998-4100
Fax: 1-561-241-6640
Toll Free: 1-888-414-2645

Eaton's Electrical Group
Electronics Division
P.O. Box 14460
St. Louis, MO 63178-4460
Tel: 1-636-394-2877
Fax: 1-636-527-1607

Europe

Eaton's Electrical Group
Electronics Division
Burton-on-the-Wolds
Leicestershire, LE 12 5th UK
Phone: +44 (0) 1509 882 600
Fax: +44 (0) 1509 882 786

Eaton's Electrical Group
Electronics Division
Avda Santa Eulalia, 290
Terrassa, Barcelona 08223 Spain
Phone: +34-93-736-2813
Fax: +34-93-783-5055

Asia Pacific

Eaton's Electrical Group
Electronics Division
No.2, #06-01
Serangoon North Avenue 5
Singapore 554911
Tel: +65 6645 9888
Fax: +65 6728 3155

The only controlled copy of this Data Sheet is the electronic read-only version located on the Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Bussmann does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

**Eaton's Electrical Group
Electronics Division**
114 Old State Road
Ellisville, MO 63021
United States
www.eaton.com/elx



© 2014 Eaton
All Rights Reserved
Publication No. 10250 — BU-SB14404
June 2014

Eaton is a registered trademark.

All other trademarks are property of their respective owners.

www.eaton.com/elx