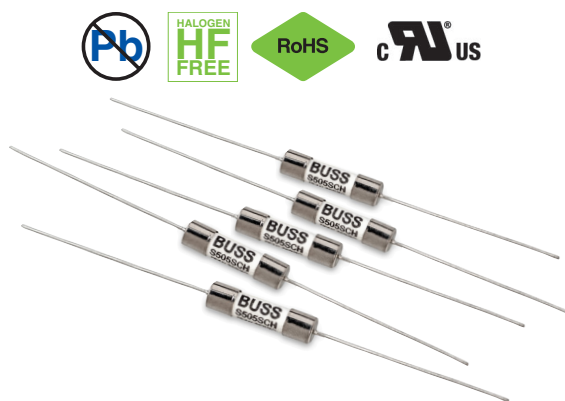


S505SCH

5 x 20 mm Time-delay, high I^2t , axial lead,
ceramic tube fuses



Product description

- Time-delay, high breaking capacity
- High I^2t
- Nickel-plated brass end cap construction
- 5 x 20mm physical size
- Halogen free, lead free, RoHS compliant

Applications

Primary circuit protection:

- Power supplies
- LED lighting
- LED/LCD televisions
- Appliances and white goods
- Printers

Agency information

- cULus Recognition file number: E19180, Guide JDYX2/JDYX8
- CQC: 14012118443, 14012118444
- KC-Mark: File SU05030-14002
- TUV: R50294952

Ordering

- Specify packaging prefix and part number as shown

Packaging prefix
BK/

Part number
S505SCH-1-R

Packaging prefixes

- BK/20 parts in a carrier, 5 carriers in a box
- TR2/1500 parts per reel, tape width 52mm
- TR3/1500 parts per reel, tape width 54mm

Electrical characteristics

I _n	1.5I _n min minute	2.1I _n max minute	2.75I _n min ms	max s	4I _n min ms	max s	10I _n min ms	max ms
3.15A	60	30	750	80	95	5	10	150
5A-6.3A	60	30	750	80	150	5	10	150

Product specifications

Part number ⁵	Voltage rating AC	Interrupting rating at rated voltage (50 Hz) AC ¹ (amps)	Typical DC cold resistance (Ω) ²	Typical pre-arcing I ² t (A ² s) ³	Typical voltage drop (mV) ⁴	cURus	KC	CQC	TUV
S505SCH-3.15-R	250	1500	0.017	120	67	x	x	x	x
S505SCH-5-R	250	1500	0.014	160	90	x	x	x	x
S505SCH-6.3-R	250	1500	0.010	330	85	x	x	x	x

1 Interrupting ratings 1A to 10A were measured at 70% to 80% PF on AC.

2 Typical DC cold resistance measured at <10% of rated current.

3. Typical I²t value is measured at 10 times the rated current under DC.

4. Typical voltage drop is measured at 20°C ambient temperature at rated current.

5. Part number definition: S505SCH-xxx-R

S505 = Product code

SCH = Single cap- high I²t

xxx = Ampere rating

-R = RoHS compliant

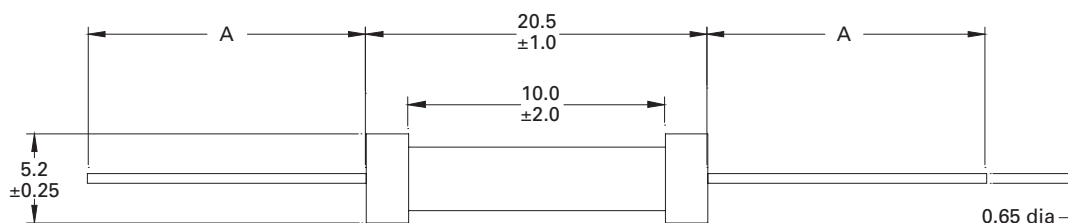
Dimensions—mm

A

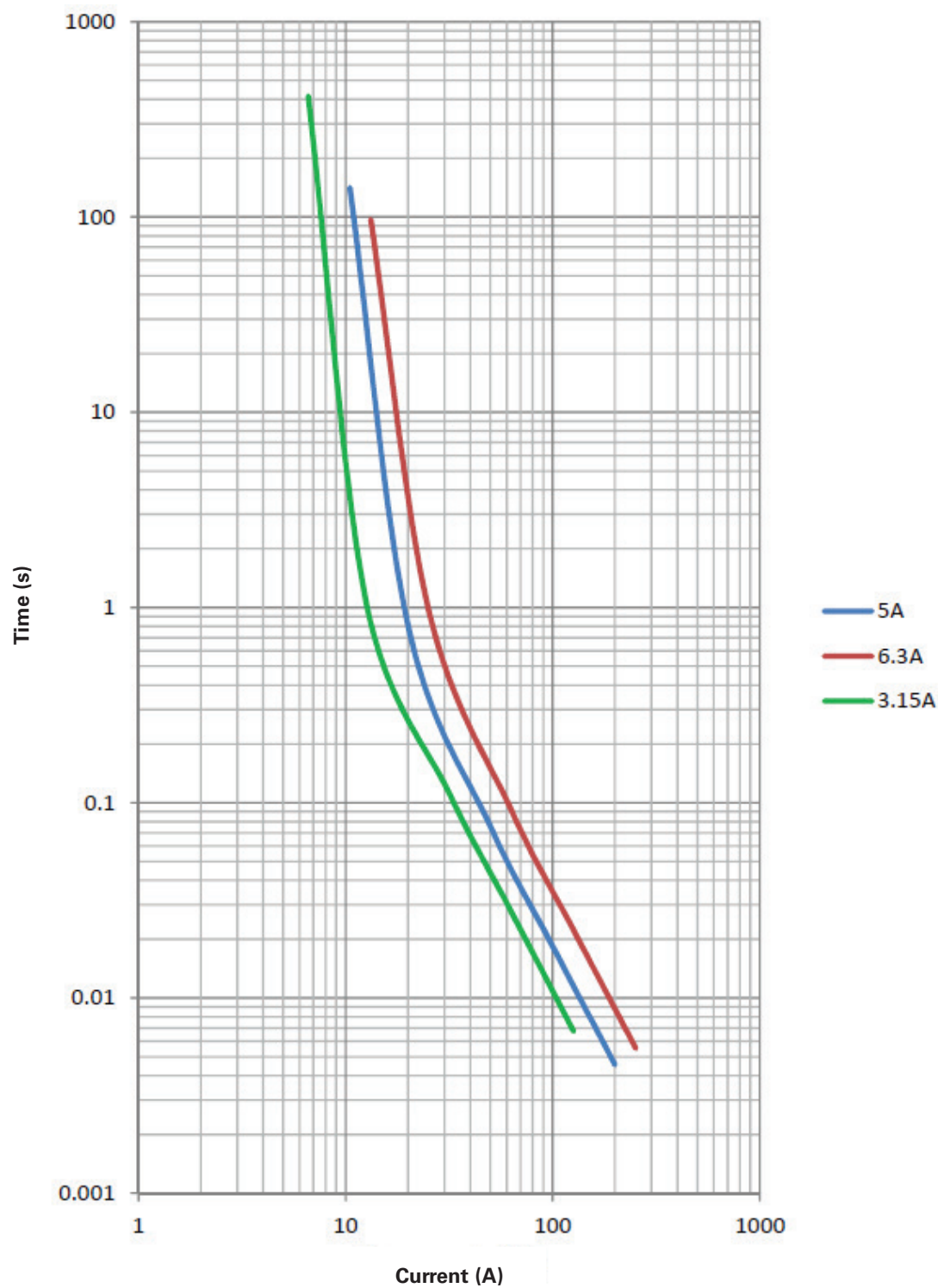
BK: 38.1±0.38

TR2: 15.0 typ

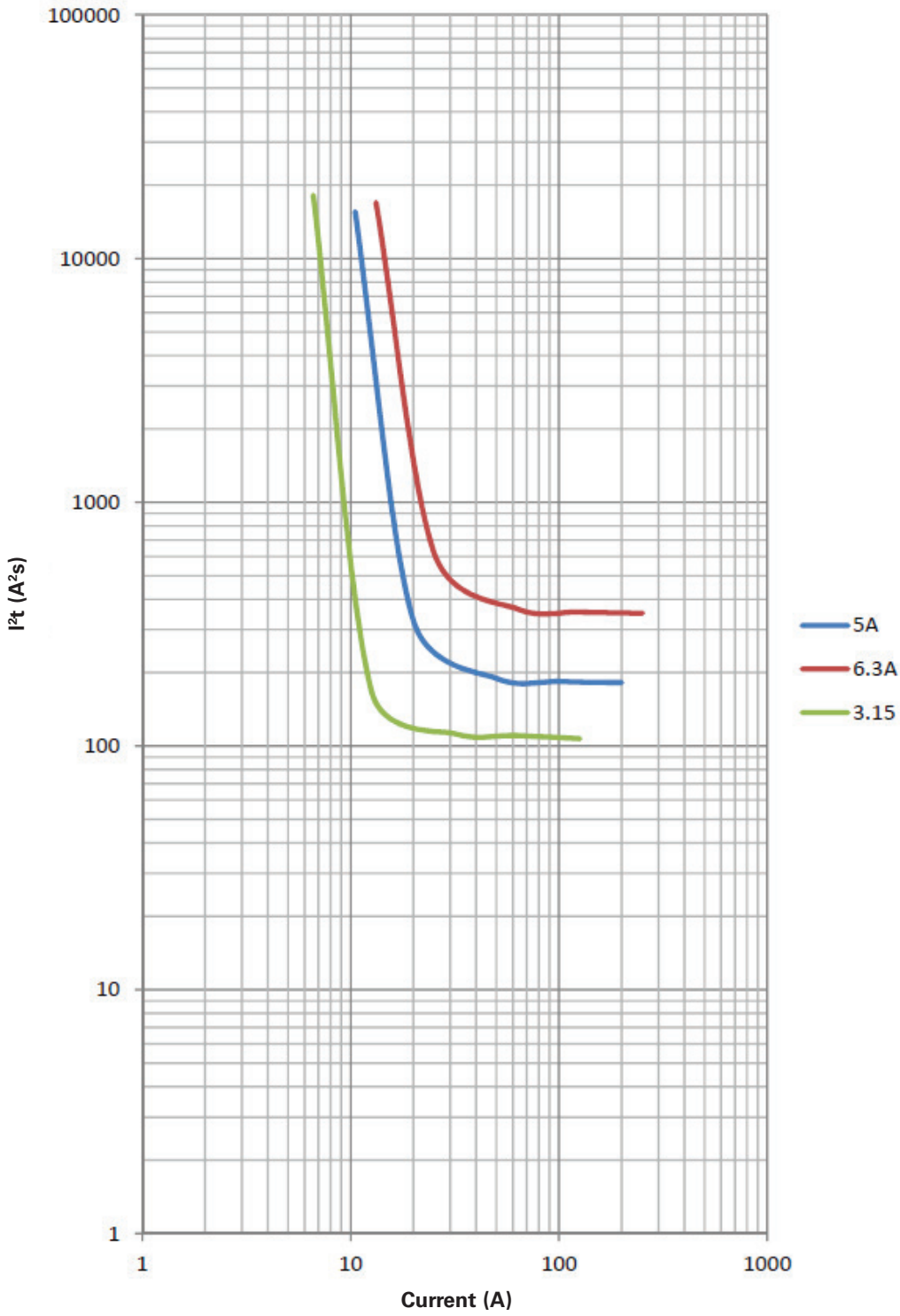
TR3: 16.0 typ



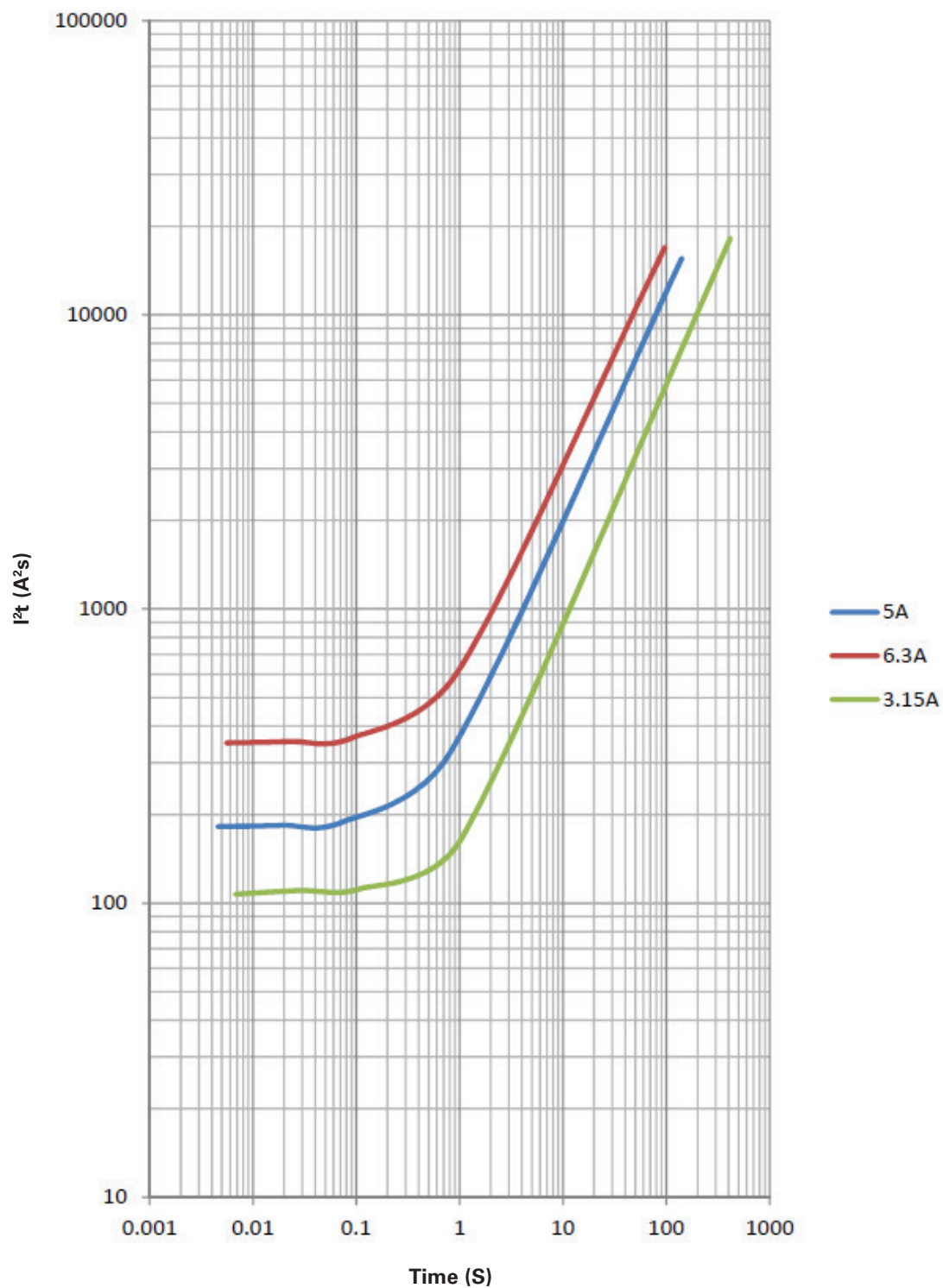
Time vs. current curve



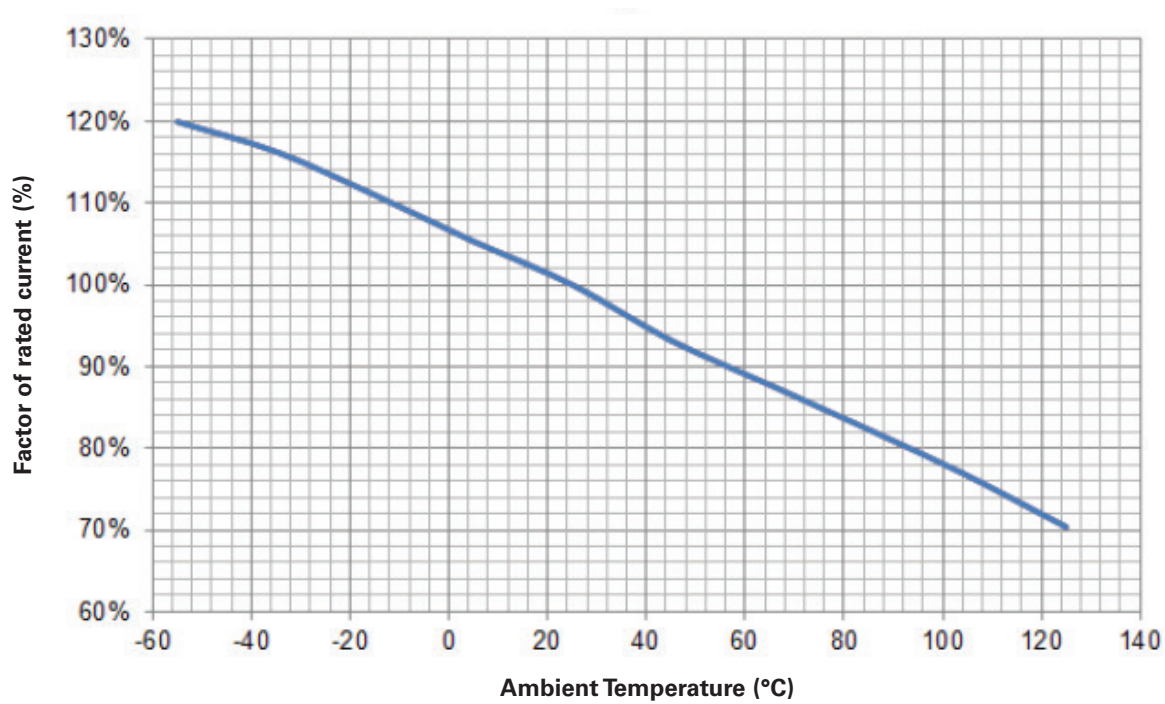
I²t vs. current curve



I^2t vs. time curve



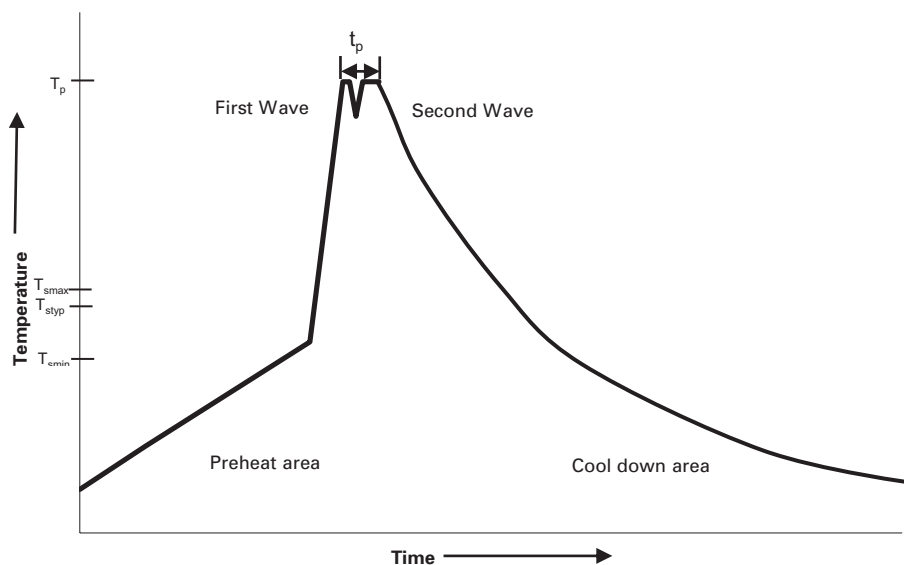
Temperature derating curve



Environmental data

Operating temperature: -55°C to 125°C (with derating)
Thermal shock: MIL-STD- 202G, Method 107G, test condition B (5 cycles - 65°C to 125°C)
Vibration: MIL-STD- 202G, method 201A
Humidity: MIL-STD- 202G, method 103B, test condition A
Salt spray: MIL-STD- 202G, method 101E, test condition B

Wave solder profile



Reference EN 61760-1:2006

Profile Feature	Standard SnPb Solder	Lead (Pb) Free Solder
Preheat		
• Temperature min. (T_{smin})	100°C	100°C
• Temperature typ. (T_{styp})	120°C	120°C
• Temperature max. (T_{smax})	130°C	130°C
• Time (T_{smin} to T_{smax}) (t_s)	70 seconds	70 seconds
Δ preheat to max Temperature	150°C max.	150°C max.
Peak temperature (T_p)*	235°C – 260°C	250°C – 260°C
Time at peak temperature (t_p)	10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each wave
Ramp-down rate	~ 2 K/s min ~3.5 K/s typ ~5 K/s max	~ 2 K/s min ~3.5 K/s typ ~5 K/s max
Time 25°C to 25°C	4 minutes	4 minutes

Manual solder

350°C, 4-5 seconds. (by soldering iron), generally manual, hand soldering is not recommended.

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