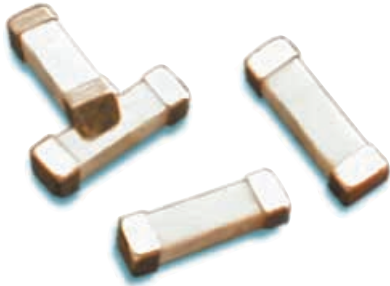
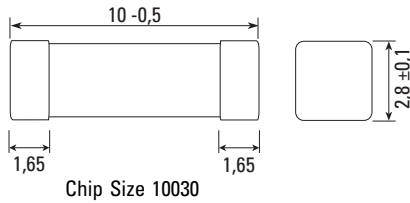


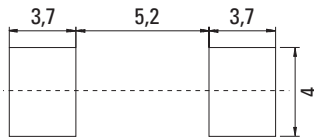
TTP / No. 457



Dimensions (mm)



Pad Layout



Telecom Tube Protector

Overcurrent Protection for Telecom Equipment

Time-Current Characteristic

Transient Tolerant

Applicable Standards

- UL 1950/60950 3rd Edition
- Telcordia (Bellcore) GR-1089
- FCC 47 CFR Part 68
- ITU-T K. 20, K.21 and K.45.

Approvals

cULus Recognized: File No. E 67006

Features

- Surge proof for telecom line applications
- No need for series resistors (1.25A & 2.00A)
- Reduced PCB space requirements
- Lead-free construction
- Flame resistant ceramic housing
- Irreversible physical separation under fault
- Highly defined cut-off times
- Low internal resistance minimizes line losses

WebLinks

Data Sheet - latest version

www.wickmannusa.com/products/457.pdf

Approval Certificates

www.wickmannusa.com/approvals

Packaging

www.wickmannusa.com/pack

Telecom Standards

www.wickmannusa.com/download/teleguide.pdf

Specifications

Packaging Code and Info

- 000: 2500 pcs./330mm reel (Blister Tape)
- 001: 500 pcs./178mm reel (Blister Tape)

Materials

- Housing: Ceramic tube
- Element: Wire
- Terminals: Copper, nickel & silver plated

Operating Temperature

-40°C to +125°C (consider de-rating)

Climatic Test

Damp heat, steady state
40°C/93%/21 days (IEC 60068-2-3)

Stock Conditions

+10°C to +60°C
relative humidity ≤ 75% yearly average,
without dew, maximum value for 30 days - 95%

Recommended Soldering

260°C, 3 sec. (Wave)
240°C, 30 sec. (Reflow)

Solderability

acc. to IEC 60068-2-58
235°C, 2 sec.

Soldering Heat Resistance

260°C, 10 sec. (IEC 60068-2-58)
280°C, 5 sec. (IEC 60068-2-58)

Recommended Solder Glue

Grace Amicon 125 F or equivalent

Minimum Cross Section, Copper

Conducting path - 0.175mm²
Path thickness - 0.035mm

Mounting

Avoid circuit traces below the 457.
457 should not be enclosed in potting materials.



Marking

Logo, Current Rating




Unit Weight

0.25g (approx.)

Operating Conditions

Type (I)	100% x I 	250% x I 
500mA ... 2.00A	> 4h	1 ... 120s

Permissible continuous operating current is ≤ 80% at ambient temperature of 23°C (73.4°F).

Type Code	Current	Voltage Rating	Interrupting Rating 50-60Hz, cos φ = 1.0 250VAC 600VAC		Voltage Drop 1.0 x I _{Rated}  max. (mV)	Cold Resistance 0.1 x I _{Rated}  max. (mΩ)	Melting Integral 10 x I _{Rated}  typ. (A ² s)	Approval cURus
0500	500mA	250VAC	50A	60A	450	640	2	•
1250	1.25A	250VAC	50A	60A	250	150	16	•
1251	2.00A	250VAC	50A	60A	375	115	18	•

AC Power Fault Ratings

Type Code	UL 1950/60950 3rd Edition				Telcordia GR-1089 (2nd Level)			
	Test M1 600V/1.5s	Test M2 600V/5s	Test M3 600V/30min	Test M3 Max. Δ T (°C)	Test 1 277V/15min	Test 2 600V/5s	Test 3 600V/5s	Test 4 600V/15min
0500	40A	7A	2.2A	--	25A	60A	7A	2.2A
1250	40A	7A	2.2A	120	25A	60A	7A	2.2A
1251	40A	7A	2.2A	50	25A	60A	7A	2.2A

Lightning Surge Ratings

Type Code	FCC 47 CFR Part 68		Telcordia GR-1089 (1st Level)	
	Type A Metallic 800V/10x560µs/2 pulses	Type A Longitudinal 1500V/10x160µs/2 pulses	Test 3 1000V/10x1000µs/50 pulses	Test 4 2500V/2x10µs/20 pulses
0500	45A	70A	30A	N/A
1250 ¹	115A	160A	100A	500A
1251 ¹	115A	160A	100A	500A

¹ Contact WICKMANN for lightning surge test data per European telecom equipment standards - ITU-T K. 20, K.21 and K.45.

Order Information

Qty.	Order-Number	Series	Type Code	Pack. Code
		457		

Specifications are subject to change without notice.

TTP / No. 457

