



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!



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To Digi Key

Micro Chip Fuse
ERBSE type

Reliability test Data

Panasonic Electronic Devices Co., Ltd
Circuit Components Business Unit

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Panasonic

1. Resistance to Soldering Heat

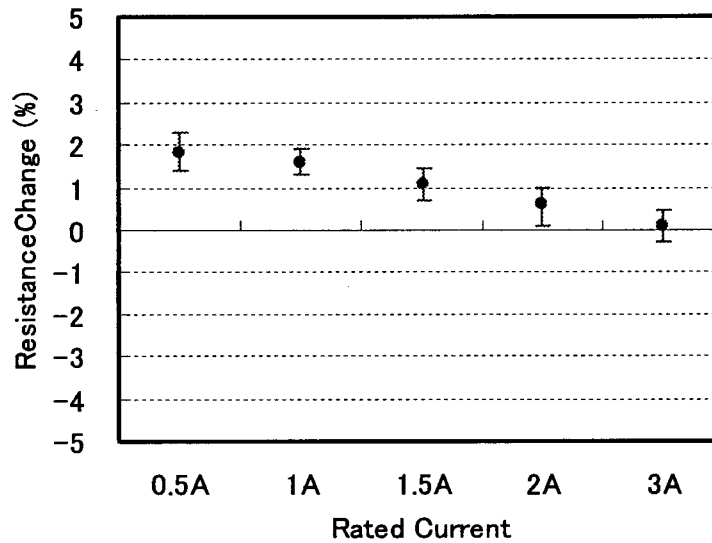
Method: Reflow peak temperature: 260 deg.C, time: 10s

Criteria and Result: Resistance change $< \pm 10\%$,

100% of rated current at 25 deg.C : No open for 4 hours minimum

200% of rated current at 25 deg.C. : Open within 5 seconds maximum

n=12



2. Temperature Cycle

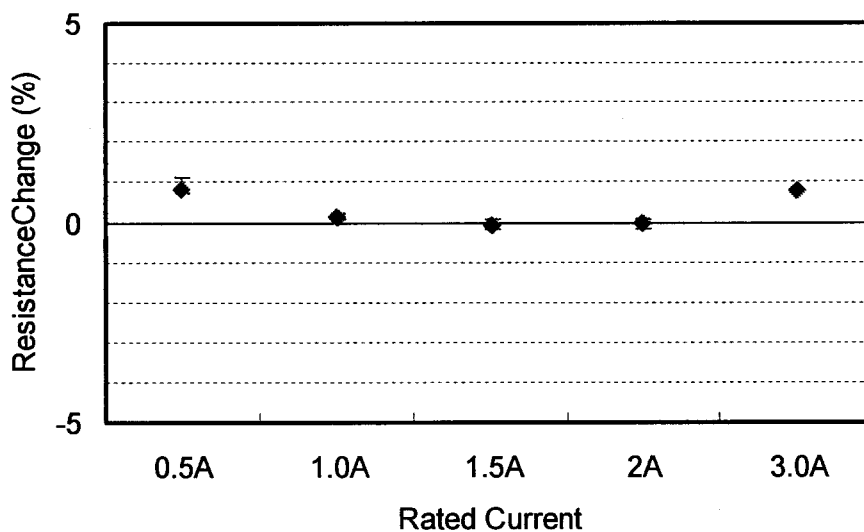
Method: -40 to +100 deg.C (each 30 minutes), 5 cycles

Criteria and Result: Resistance change $< \pm 10\%$,

100% of rated current at 25 deg.C : No open for 4 hours minimum

200% of rated current at 25 deg.C. : Open within 5 seconds maximum

n=24



Panasonic

3. Vibration

Method: Testing frequency: 10 to 55 to 10 Hz (sweep time 1 minutes),

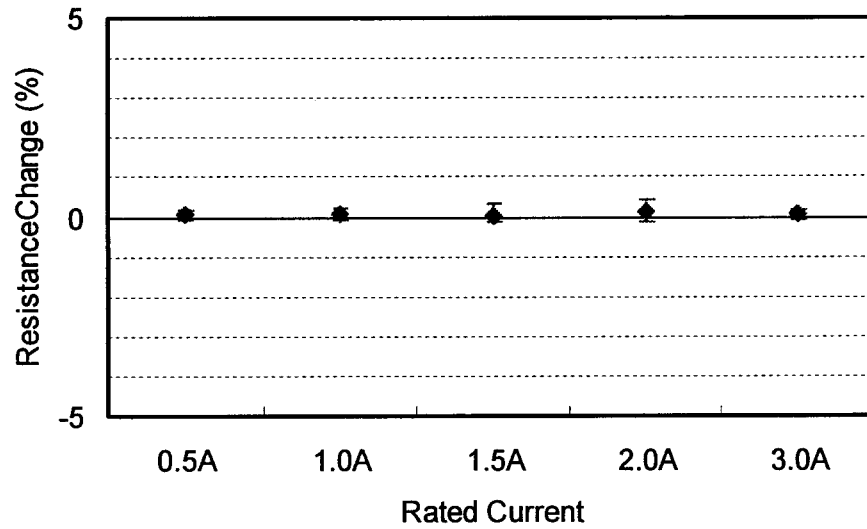
All the amplitude: 1.5 mm, 3(X,Y,Z) directions each 2 hours.

Criteria and Result: Resistance change $< \pm 10\%$,

100% of rated current at 25 deg.C : No open for 4 hours minimum

200% of rated current at 25 deg.C. : Open within 5 seconds maximum

n=24



Panasonic

4. Endurance (Under Load and Heat)

Method: Temp.: 70 +/-2 deg.C ,

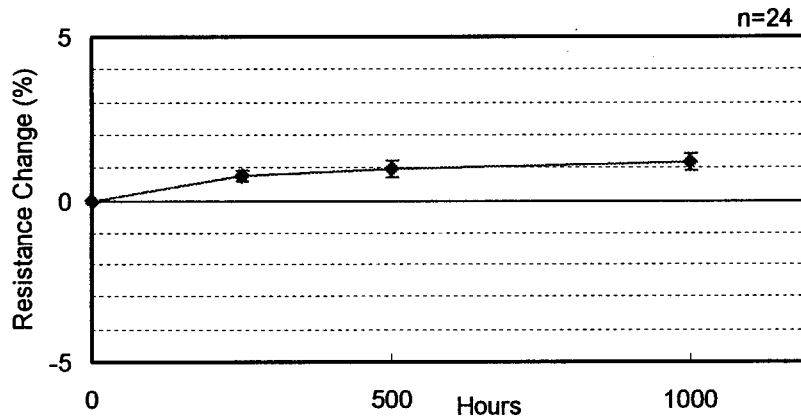
Load: 70% rated current/1.5 hours ON and 0.5 hours OFF/1000 hours.

Criteria and Result: Resistance change <+/-10%,

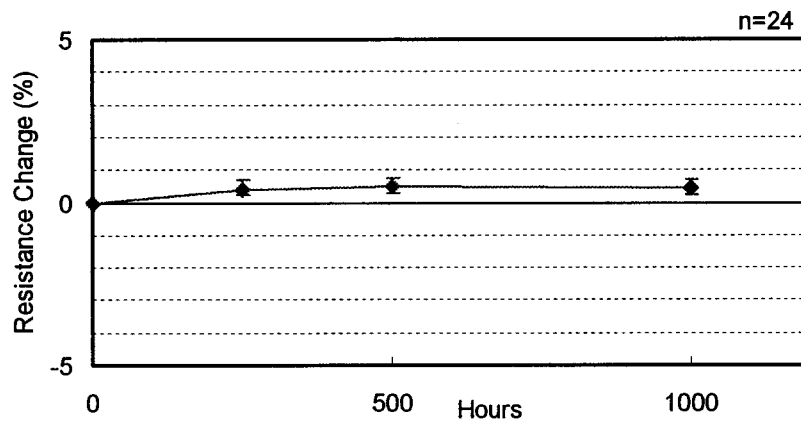
100% of rated current at 25 deg.C : No open for 4 hours minimum

200% of rated current at 25 deg.C. : Open within 5 seconds maximum

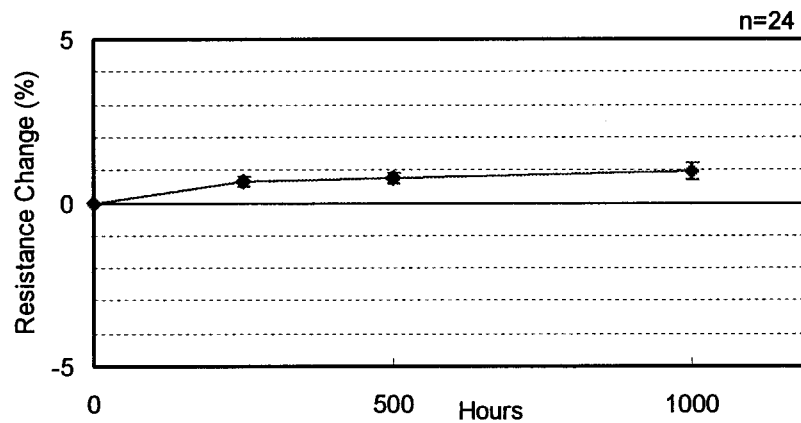
ERBSE0R50



ERBSE1R50



ERBSE3R00



Panasonic

5. Endurance (Under Load and Damp)

Method: Temp. and Humidity: 60 +/-2 deg.C and 90 to 95% RH,

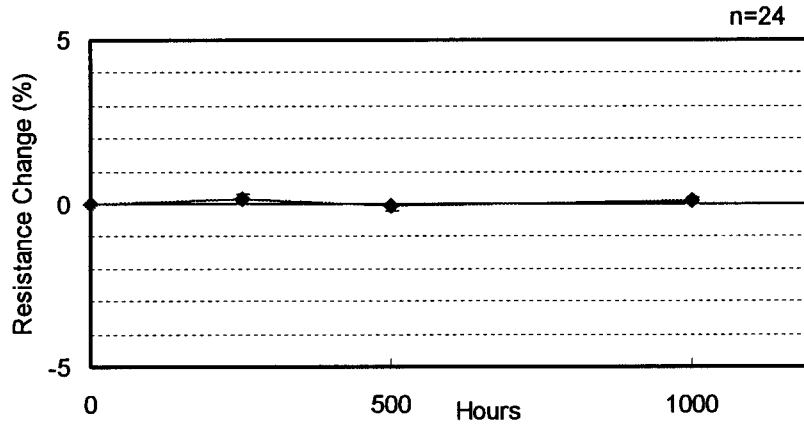
Load: 70% rated current/1.5 hours ON and 0.5 hours OFF/1000 hours.

Criteria and Result: Resistance change <+/-10%,

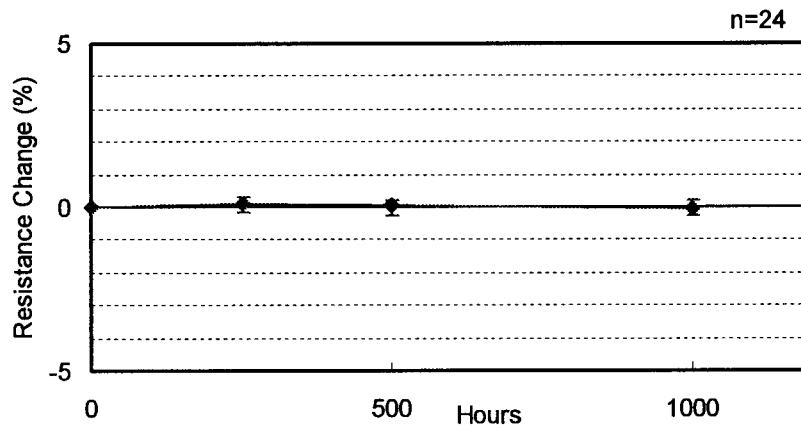
100% of rated current at 25 deg.C : No open for 4 hours minimum

200% of rated current at 25 deg.C : Open within 5 seconds maximum

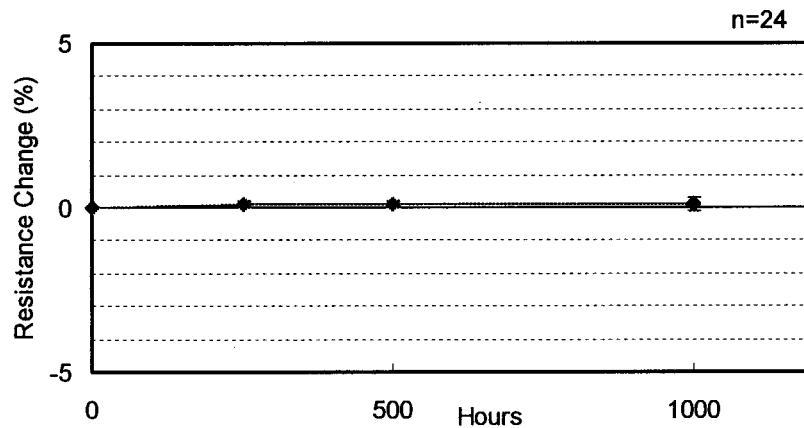
ERBSE0R50



ERBSE1R50



ERBSE3R00



Panasonic

6. Resistance to Damp

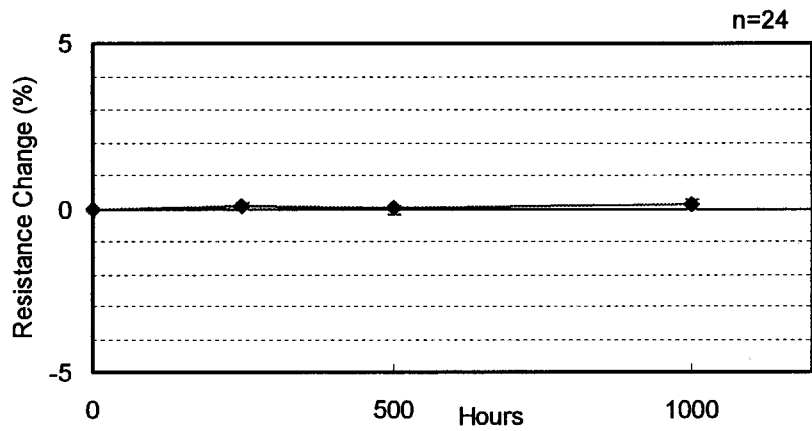
Method: Temp. and Humidity: 60 +/-2 deg.C and 90 to 95% RH/1000 hours (no load).

Criteria and Result: Resistance change <+/-10%,

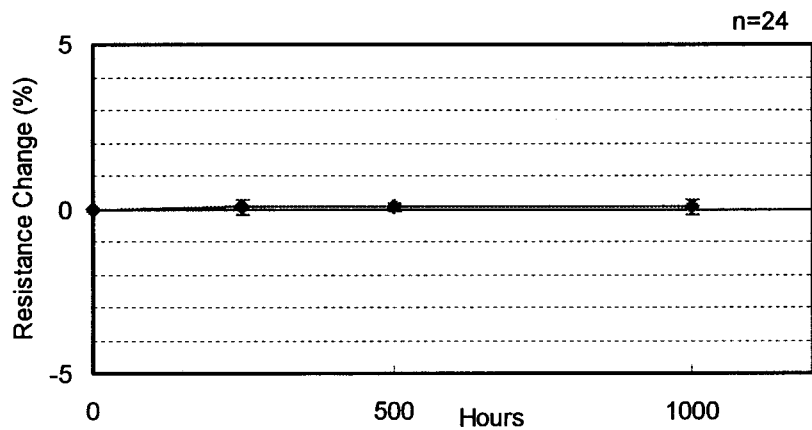
100% of rated current at 25 deg.C : No open for 4 hours minimum

200% of rated current at 25 deg.C : Open within 5 seconds maximum

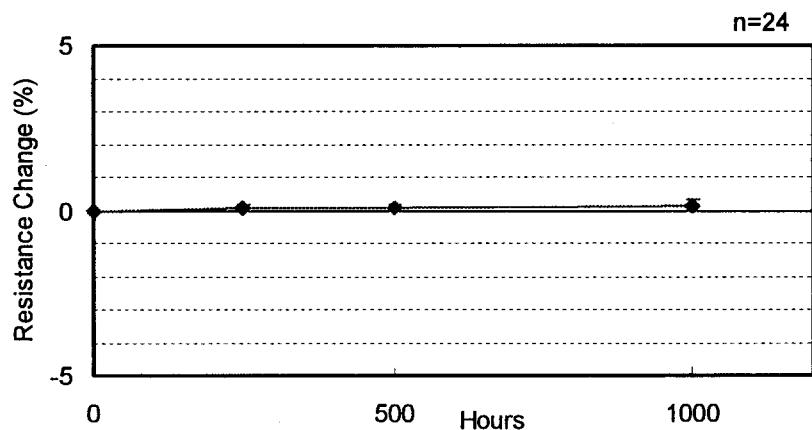
ERBSE0R50



ERBSE1R50



ERBSE3R00



Panasonic

7. Resistance to Solvent

Method: Appearance after dipping into 2-propanol(IPA)/10 minutes.

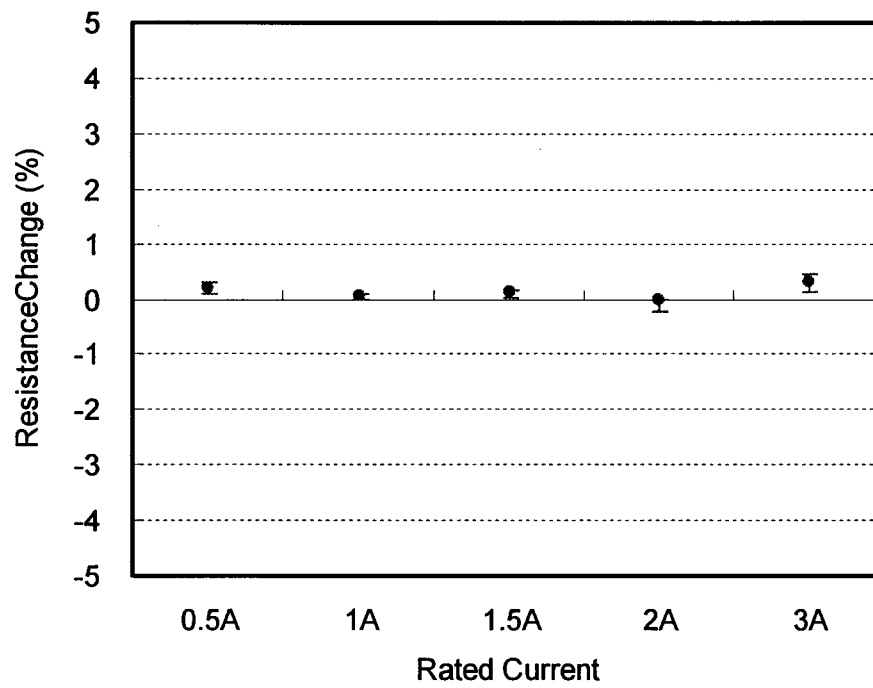
Criteria and Result:

No abnormality on appearance, Resistance change $< \pm 10\%$,

100% of rated current at 25 deg.C : No open for 4 hours minimum

200% of rated current at 25 deg.C. : Open within 5 seconds maximum

n=12



Panasonic

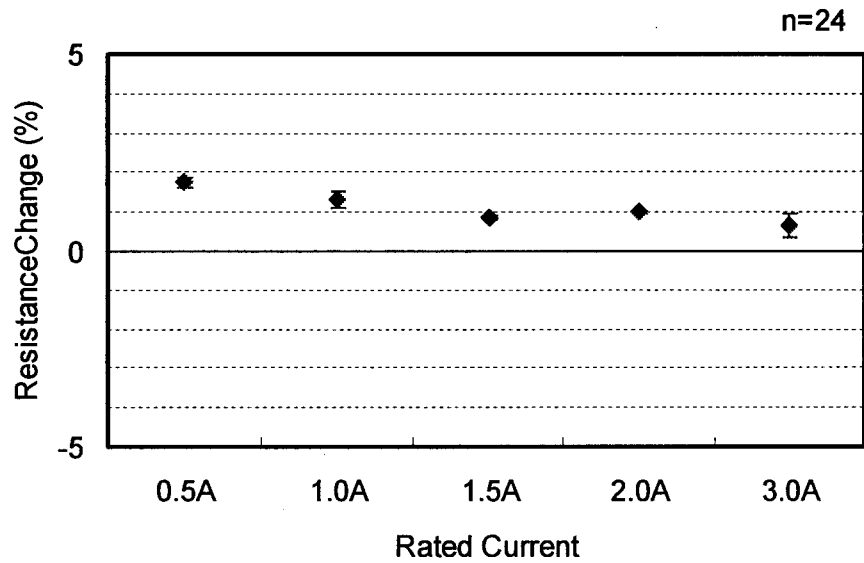
8. Resistance to Heat

Method: Temp.: +100 +/-2 deg.C ,

Criteria and Result: Resistance change <+/-10%,

100% of rated current at 25 deg.C : No open for 4 hours minimum

200% of rated current at 25 deg.C. : Open within 5 seconds maximum



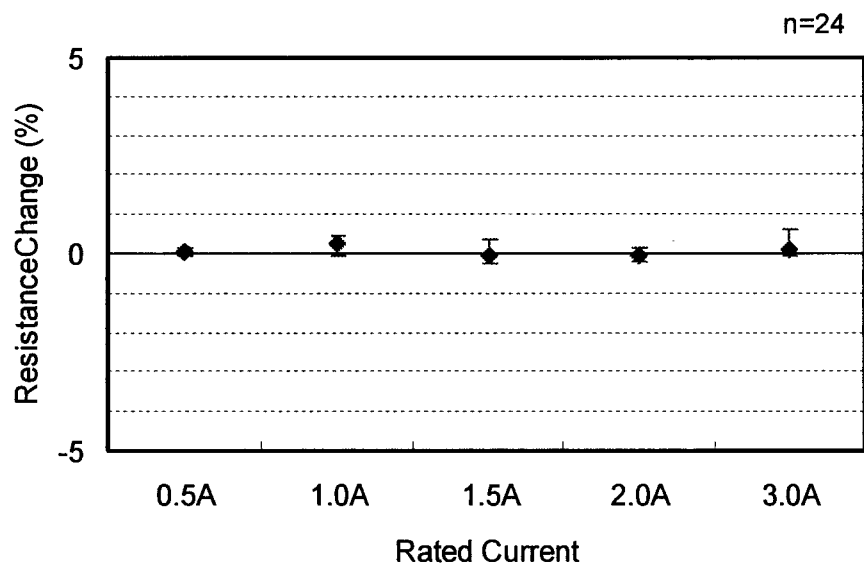
9. Resistance to Cold

Method: Temp.: -40 +/-2 deg.C ,

Criteria and Result: Resistance change <+/-10%,

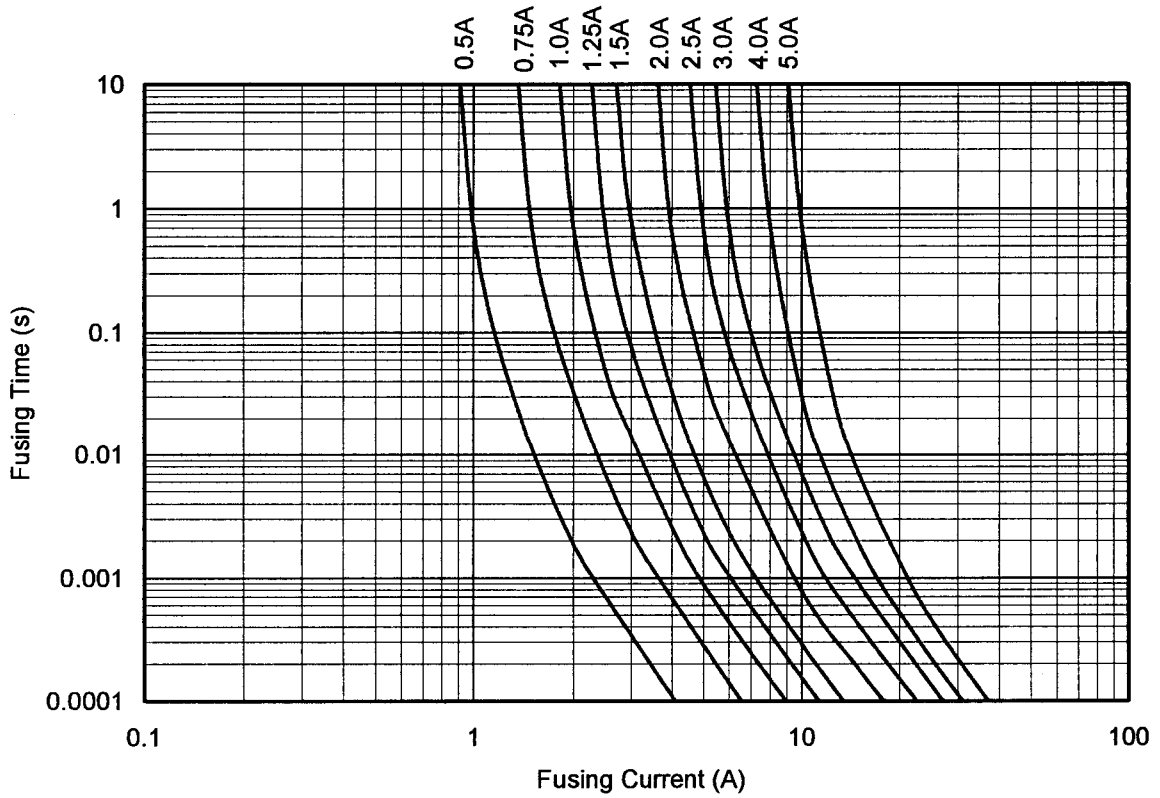
100% of rated current at 25 deg.C : No open for 4 hours minimum

200% of rated current at 25 deg.C. : Open within 5 seconds maximum



10. Reference data (Fusing Characteristics)

ERBSE series / I-t Characteristics (25°C, Typical)



ERBSE series / I²t Characteristics (25°C, Typical)

