K12110 Series Slow

Slow Acting SMD Fuses

Datasheet

Description

K12 110 Series are the fuses set the industry standard for performance, reliability and quality. The solder–free design provides excellent on–off and temperature cycling characteristics during use And also makes our SMD fuses more heat and shock tolerant than typical sub miniature fuses.

	Electrical Characteristics					
Rated Current	1.0In	2.0In	2.5In	3.0In	3.5In	10.0In
1A~3A	4 hour min.	1sec – 60sec	5 sec max.	0.1sec – 3sec	–	0.2ms – 20ms
3.5~5A	4 hour min.	–	5 sec max.	0.1sec – 3sec	–	0.2ms – 20ms
7A~15A	4 hour min.	–	–	–	5 sec max.	0.2ms – 10ms

Features

- High inrush current withstanding capability
- AEC–Q200 Automotive Grade Certified
- Compatible with re flow and wave solder
- Ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

Specifications

Specification								
Part 序号	Rated Voltage DC		Rated Current (A)	Breaking Capacity (A) [1]	Typical Cold. Resistance (m Ohms) [2]	Typical Voltage Drop (m V)	Typical Pr e–Arcing I^2t (A2Sec) [3]	Alpha Mark
K12 110 1	72V	63V	1	50A	480	510	0.11	H
K12 110 1.5			1.5	50A	230	367	0.17	K
K12 110 2			2	50A	140	316	0.41	N
K12 110 2.5			2.5	50A	80	240	0.68	O
K12 110 3			3	50A	50	187	1.5	P
K12 110 3.5			3.5	50A	38	180	2	R
K12 110 4			4	50A	34	173	2.5	S
K12 110 4.5	32V		4.5	50A	25	164	2.65	X
K12 110 5			5	50A	21.5	145	4	T
K12 110 7			7	50A	12.3	140	6.6	7
K12 110 8	24V		8	300A	10	123	16	M
K12 110 10			10	300A	7	110	18	U
K12 110 12			12	300A	5	85	22	12
K12 110 15			15	300A	3.5	78	30	15

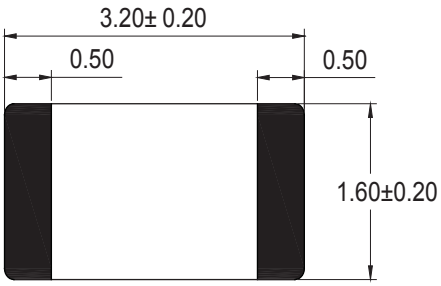
* DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
* DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25℃
* Typical P re–arching I^2t are measured at 10In Current

Choice fuse for surge application (USB charger etc.), make sure the I^2t of fuse is 4 times than surge.

Dimension

Drawing not to scale (Unit: mm)

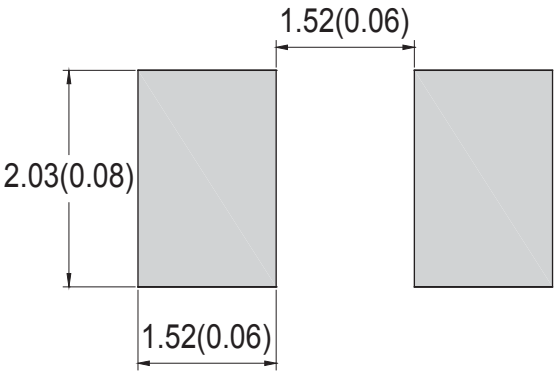
Top view

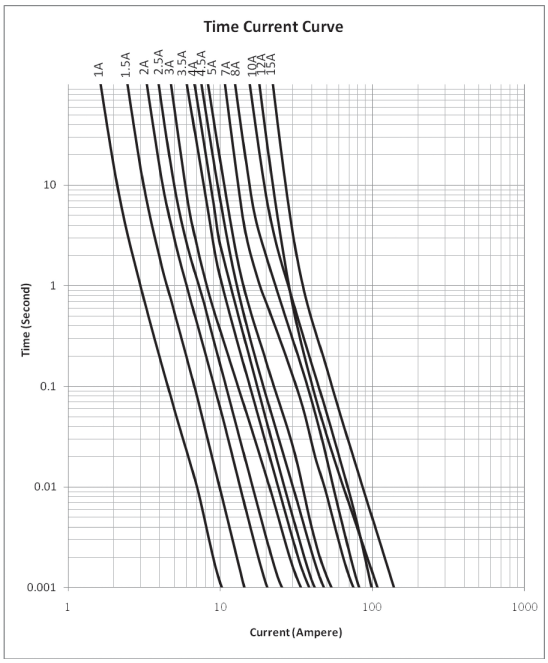


Side view

Recommended Land Pattern

Unit: mm(inch)





Soldering Method

◆ **Wave Solder**

* Reservoir temperature: 260℃
* Time in reservoir: 10 seconds maximum

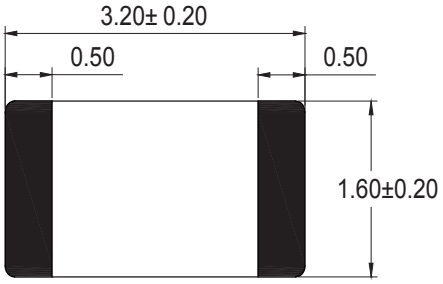
◆ **Infrared Reflow**

* Temperature: 260℃
* Time: 30 seconds maximum

Dimension

Drawing not to scale (Unit: mm)

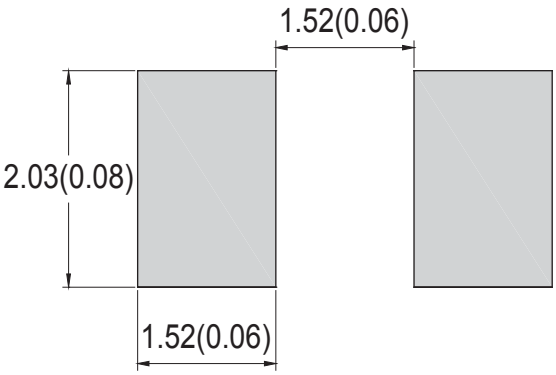
Top view

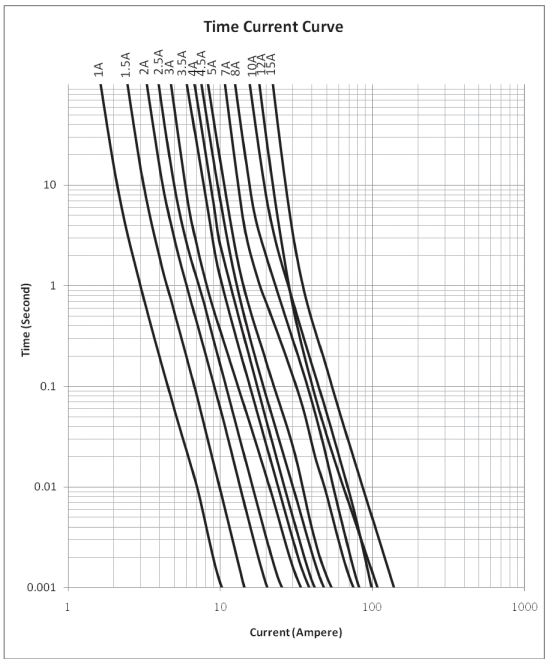


Side view

Recommended Land Pattern

Unit: mm(inch)





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Temperature Derating Curve

Normal ambient temperature: 23+/−3℃

Operating temperature: −55 ~ 125℃, with proper correction factor applied