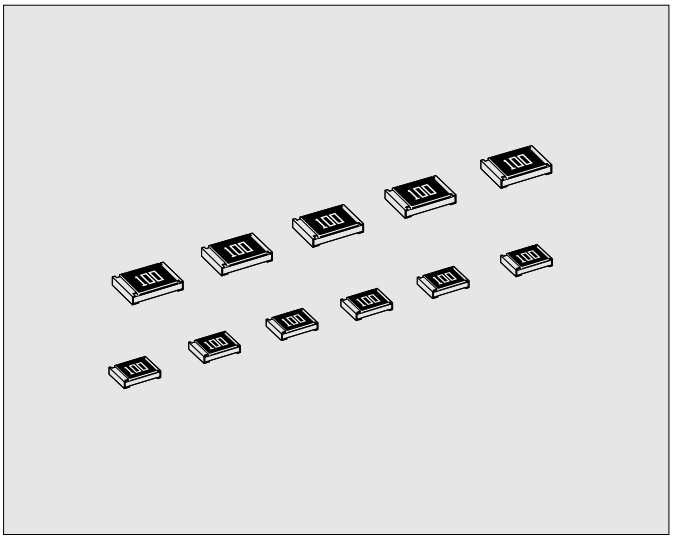
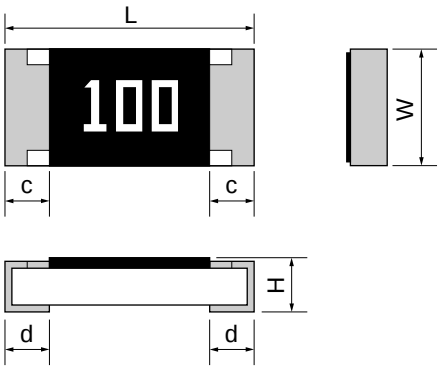
FRC20, 32

●Features

1. No flame or smoke in overload conditions.
2. Applications suitable for flow and reflow soldering.
3. Ideal product for use in battery circuit applications.



●Dimensions



The nominal resistance is marked on the surface of over coating with the use of 3-digits.

Unit : mm

Style	Metric	Inch	L	W	H	c	d	*Unit weight/pc.
FRC20	2012	0805	2.0±0.1	1.25±0.1	0.6±0.1	0.4±0.2	0.4±0.2	6mg
FRC32	3216	1206	3.2±0.2	1.6±0.15	0.6±0.1	0.5±0.2	0.5±0.25	10mg

Note : Please contact KAMAYA for 0603 size.

*Values for reference

●Product Classification

Example

FRC	20	C	2A	100	**J**	TP
①Product Type	②Size	③Characteristic Code	④Rated power	⑤Rated Resistance	⑥Tolerance on Rated Resistance	⑦Packaging

Style

①Product Type

②Size	
Code	Size
20	2012
32	3216

③Characteristic Code	
Code	Fusing Characteristic
C	Standard

④Rated power	
Code	Rated power
2A	0.1W
2B	0.125W

⑤Rated Resistance

E24 Series
e.g : 100=10 ohm

⑥Tolerance on Rated Resistance	
Code	Tolerance on Rated Resistance
J	±5%

*⑦Packaging	
Code	Packaging
B	Bulk(Loose Package)
TP	Paper Tape.

*Refer to Taping and Packaging information in page 34.35

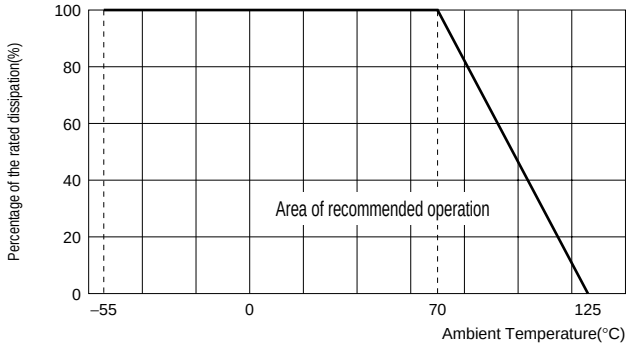
●Ratings

Style	Rated Dissipation W	Limiting Element Voltage	Tolerance on Rated Resistance	Pre-arcing Time-current Characteristic		Category Temperature Range °C
				Fusing Power	Pre-arcing Time	
FRC20	0.1	1 ohm~51 ohm	J(±5%)	2.0W	Within 30 seconds	–55~+125
FRC32	0.125			2.5W		

Note.1 Rated Voltage = $\sqrt{(\text{Rated Power})\times(\text{Rated Resistance})}$.(d.c. or a.c. r.m.s. Voltage)
Note.2 Contact us for further information on other types of style, resistance and pre-arcing time-current characteristic than those mentioned above.
Note.3 Contact us for information when inrush and surge voltage are supposed to be applied.

●Derating Curve

The derated values of dissipation at temperature in excess of 70°C shall be as indicated by the following Curve.



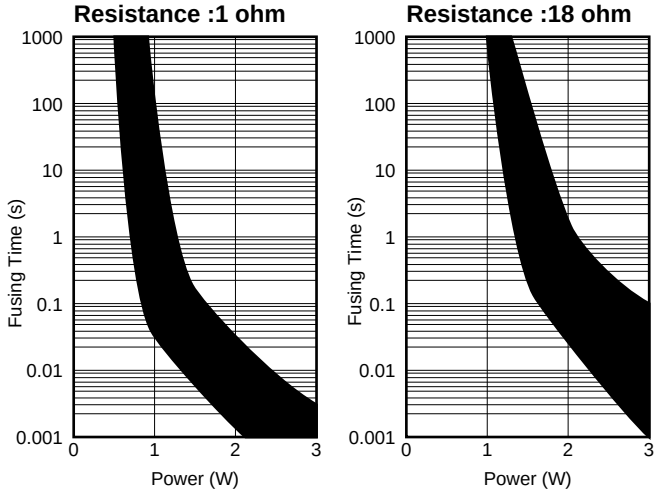
●Performance Characteristic

Description	Requirements	Test Method JIS C5202-1990
Resistance	Within specified tolerance	5.1 clause
Temperature Characteristic of resistance	T.C.R.:Within ±1,000×10^{-6}/°C	5.2 clause Room temp. and 100°C above
Overload	ΔR≤±5% No major visible damage	5.5 clause Rated voltage ×2.5, 5s
Resistance to soldering heat	ΔR≤±3%	6.4 clause Dip into 260°C solder bath for 10s
Rapid change of temperature	ΔR≤±5% No major visible damage	7.4 clause Cycle between –55°C and +125°C for 5 cycles
Endurance in humidity	ΔR≤±5% No major visible damage	7.9 clause Rated voltage 1.5h "ON", 0.5h "OFF", 40°C. 95%R.H. 1000h
Endurance at 70°C	FRC20 : ΔR≤±10% FRC32 : ΔR≤± 5% No major visible damage	7.10 clause Rated voltage 1.5h "ON", 0.5h "OFF", 70°C. 1000h

●Example of Typical Characteristic

•Fusible characteristics

FRC20



FRC32