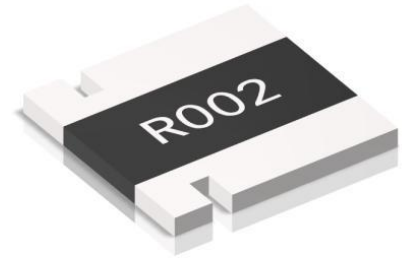


4-Terminal Epoxy SMD Chip Precision Alloy Resistor

- 4-terminal Kelvin sampling , pure copper electrode , Ideal solution for current detection applications
- high reliability and stability ,superb pulse load capability
- vacuum electron-beam welding craft , full metal structure , Coating with heat-resistant epoxy resin , excellent weather resistance
- Ultra-low thermal EMF
- Ultra-low parasitic inductance , fast response , suitable for high frequency AC current detection
- RoHS compliant



GENERAL SPECIFICATIONS

Model	Resistance Value (mΩ)	Rated Power (70°C)	Material	Tolerance	T.C.R (ppm/°C)	Inductance	Thermal EMF (0-100°C)	Temp. Range
RSKM3637	0.2	Max. 5W	M	±0.5% (D) ±1% (F) ±5% (J)	±75	0.5nH~5nH	< 1μV/°C	-55°C ~ +170°C
	0.3		M		±75			
	1		M		±75			
	2~30		K		±25			
	1~30		F		±50			

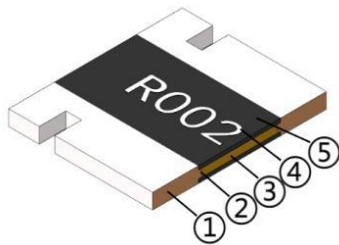
CHARACTERISTICS

Test Item	Standard	Test method
T.C.R	Within specified T.C.R	IEC60115-1 4.8, measured point 20°C ~ +130°C, reference point +20°C
Solderability	Minimum 95%	IEC60115-1 4.17, 245°C tin bath, 3s
Short time overload	△R±1%	IEC60115-1 4.13, five times rated power, 5s
Resistance to soldering heat	△R±0.5%	IEC60115-1 4.18, 260°C tin bath, maintaining 10s
Base plate bending test	Within specified value	IEC60115-1 4.33, 2mm, maintaining 60+5s
Flammability	Incomplete combustion, with the shim unignited and the pine wood board not charred	UL-94 V-0 or V-1 is acceptable, no need to do electrical test
Insulation resistance	Minimum 1000MΩ	IEC60115-1 4.6, Applying a direct current voltage of 100 V between the electrode and the substrate., maintaining 60s, then test insulation resistance value
Withstand voltage	Without breaking down or arc flash	IEC60115-1 4.7, Applying an AC VOLTS which the effective value is the maximum load voltage to the electrode and substrate at a rate of approximately 100 V/s, maintaining it for 60 ± 5 s.

CHARACTERISTICS

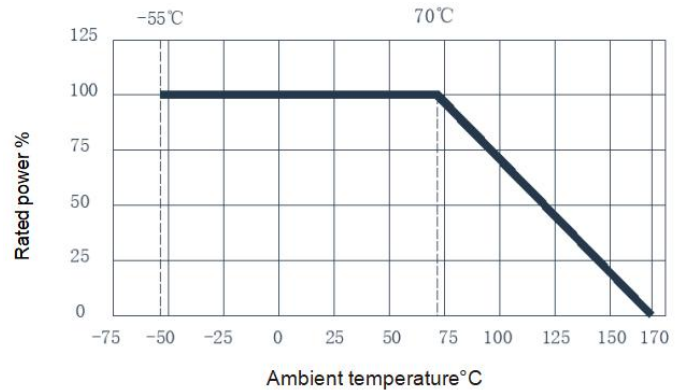
Test Item	Standard	Test method
Solvent resistance	Signage intact	IEC60115-1 4.29, IPA , temperature of a solvent : 23±5°C, maintaining 5±0.5min
High temp. % humidity	$\Delta R \pm 1\%$	Applying 10% of the rated power (current) or the maximum current of the component (whichever is lower) for a duration of 1000 hours in a temperature of 85°C and a humidity of 85% according to MIL-STD-202 method 103
High temp. storage	$\Delta R \pm 0.5\%$	IEC60115-1 4.25.3, 1000hours@170°C, without loading current and voltage
Low temp. load	$\Delta R \pm 0.5\%$	IEC60115-1 4.36, cooled from room temperature to -55°C, no load for 1.5 hours, applying rated power, continuously flowing for 45 minutes, cool for 15 minutes , then recover to room temperature for testing again.
Temp. cycle	$\Delta R \pm 1\%$	IEC60115-1 4.19, -55°C@30mins ~ +155°C@30mins ; 1000 cycles
Load life	$\Delta R \pm 1\%$	IEC 60115-1 4.25.1, 1000hrs., 70°C±2°C, rated current, or the maximum current rating of the component (whichever is lower) is applied for 1.5 hours/0.5 hour interruption

Construction

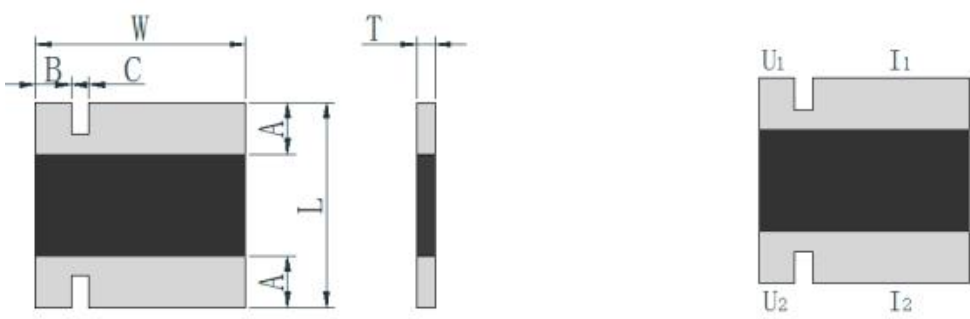


- ① Ni and Sn plating on the surface of red copper
- ② Electron-beam welding
- ③ Manganese copper/Karma/Fe-Cr-Al
- ④ Silk-screen
- ⑤ Epoxy resin

Derating curve

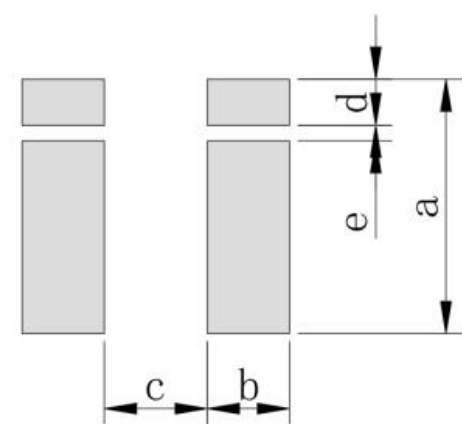


■ DIMENSIONS [mm]

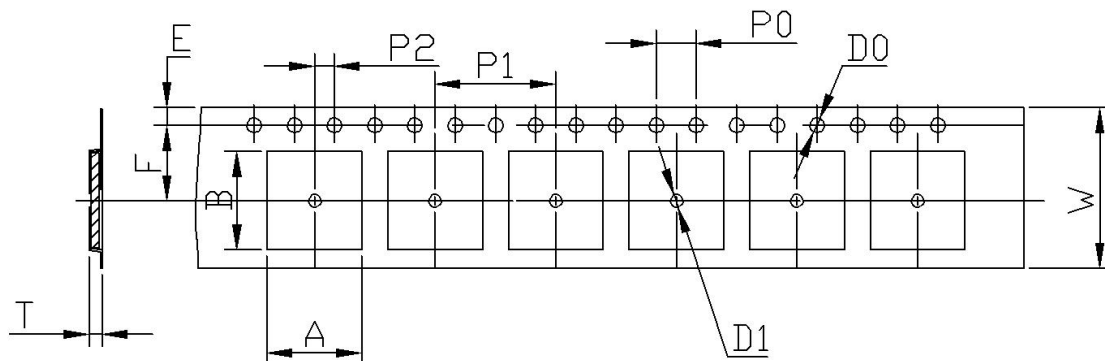
						
Remark: U1 and U2: Voltage-sensing connection I1 and I2: current connection						
Resistance Value (mΩ)	L	W	T	B	C	A
0.2	9.1±0.25	9.4±0.25	0.8±0.25	1.6±0.25	0.82±0.25	3.5±0.25
0.3						3.2±0.25
1						2.4±0.25
2~30						2.4±0.25
1~30						2.4±0.25

* Notice : Word code marking as silk-screen. In the word code "L" or "m" indicate mΩ and also show the position of decimal point, for example : 0m20=0.2mΩ, 1m50=1.5mΩ, "R" indicate Ω and also show the position of decimal point, for example : R001=1mΩ

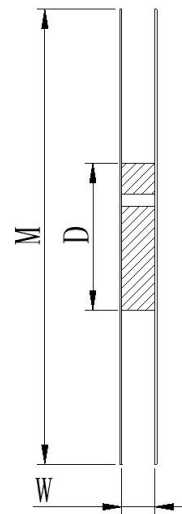
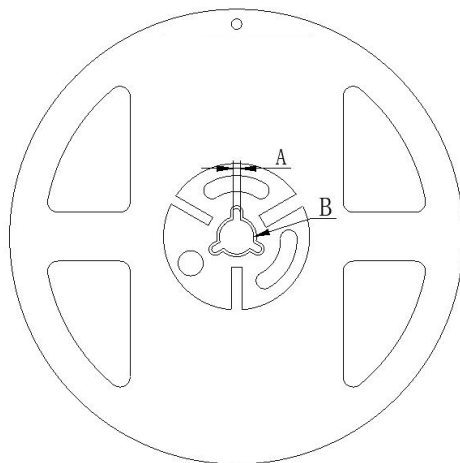
■ RECOMMENDED PAD AND SIZE [mm]

	Resistance value (mΩ)	a	b	c	d	e
	0.2~0.3	9.9	4.2	1.8	1.8	0.6
	1~30	9.9	3.2	4	1.8	0.6

Packing specifications and size [mm]



A	B	W	E	F	P0	P1	P2	ØD0	T	Qty
9.4	9.8	16	1.75	7.5	4	12	2	1.5	1.3	4,000



Reel Type	W	M	A	B	D
13" reel for 16mm tape	16.3±0.5	Φ330±2.0	2.0±0.5	Φ13.5±0.5	Φ99.0±1.0

ORDERING PROCEFURE EXAMPLE

Model#	Material	Resistance value	Tolerance	Packing code
RSKM3637	F : Fe-Cr-Al K : Karma M : Manganese copper	L200 = 0.2mΩ R002 = 2mΩ R030=30mΩ	D = ±0.5% F = ±1% J = ±5%	T0 : Tape & Reel standard B0 : without tape and reel