RSKN4026

RoHS COMPLIANT

AEC Q200

E-beam Welding Alloy Resistor

· E-beam welding craft, square hole structure with 4- terminal, pure copper electrode, ideal solution for current detection applications

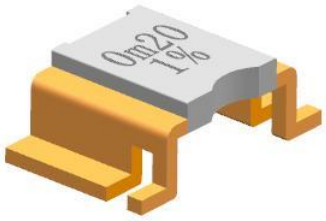
· High reliability and stability ,superb pulse load capability, ±0.5% tolerance

· Full metal structure, pickling and passivating on the surface of metal, vulcanization resistance, strong 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℃)	Material	T.C.R (ppm/℃)	Tolerance	Inductance	Thermal EMF (0-100℃)	Temp. Range
RSKN4026	0.2	12W	M	±75	±0.5 (D) ±1 (F) ±5 (J)	< 3nH	< 1μV/℃	-55℃ ~ +170℃
	0.3	11W	M	±75				
	0.5	9W	M	±75				
	0.7	7W	M	±75				
	1	6W	M	±50				
	2	6W	F	±25				
	3	5W	F	±25				
	4	4W	F	±25				
	5	3W	F	±25				
	2	6W	K	±50				
	3	5W	K	±50				
	4	4W	K	±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, maintaining10s
High temp. & humidity	△R±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	△R±0.5%	IEC60115-1 4.25.3, 1000hours @170°C, without loading current and voltage
Low temp. load	△R±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.
Temperature cycle	△R±1%	IEC60115-1 4.19, -55°C @30mins ~ +155°C @30mins ; 1000 cycles
Load life	△R±1%	IEC 60115-1 4.25.1, 1000hrs., 70℃±2℃, rated current, or the maximum current rating of the component (whichever is lower) is applied for 1.5 hours/0.5 hour interruption

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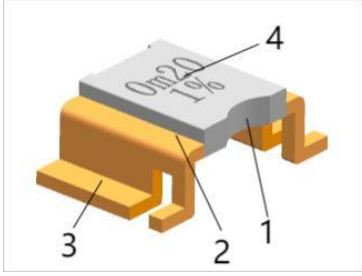
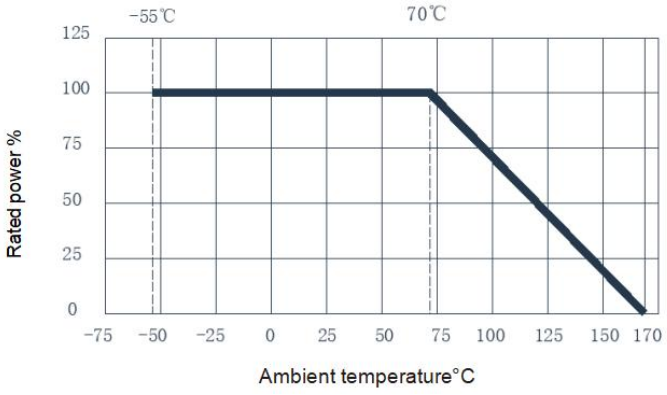
Construction

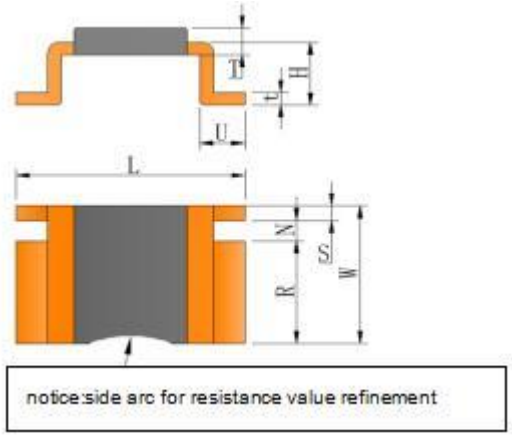


① Resistor body : Manganese copper, Karma, Fe-Cr-AL, low TCR
② Electron-beam welding
③ pur copper sampling with 4-terminal
④ Laser marking

Derating curve



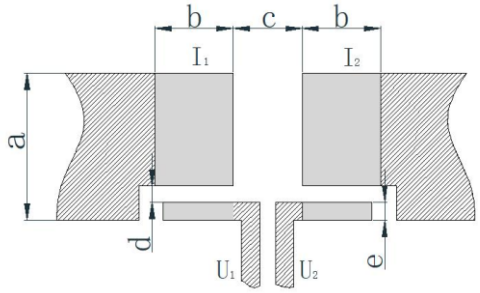
DIMENSIONS [mm]



Resistance	L	W	R	N	S	U	H	T	T
0.2mΩ	10.1±0.3	6.6 +0.35 -0.2	4.9±0.2	1.0±0.15	0.7±0.1	2.0±0.1	3.0±0.3	1.30±0.1	0.60±0.1
0.3mΩ								1.20±0.1	0.60±0.1
0.5mΩ								0.68±0.1	0.68±0.1
0.7mΩ								0.48±0.1	0.48±0.1
1mΩ								0.35±0.1	0.40±0.1
2mΩ								0.55±0.1	0.55±0.1
3mΩ								0.36±0.1	0.40±0.1
4mΩ								0.28±0.1	0.40±0.1
5mΩ								0.28±0.1	0.40±0.1
2mΩ								0.52±0.1	0.52±0.1
3mΩ								0.35±0.1	0.40±0.1
4mΩ								0.26±0.1	0.40±0.1

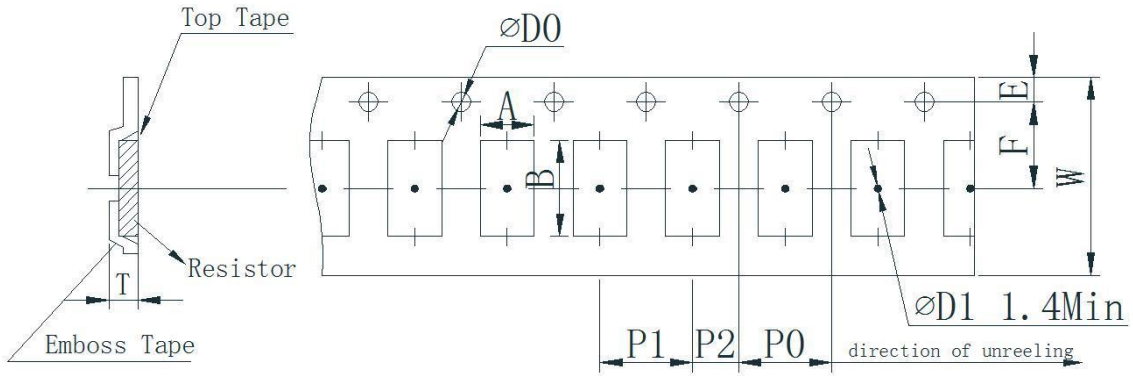
Notice : word code marking as laser engraving, the "L" is used in the naming to indicate the mΩ and also show the decimal point position, which corresponds to the mark "m". For example : 0m20=0.2mΩ ,the "R" is used in the naming to indicate the Ω and also show the decimal point position, which corresponds to the mark "R", for example :R001=1m Ω

RECOMMENDED PAD AND SIZE [mm]

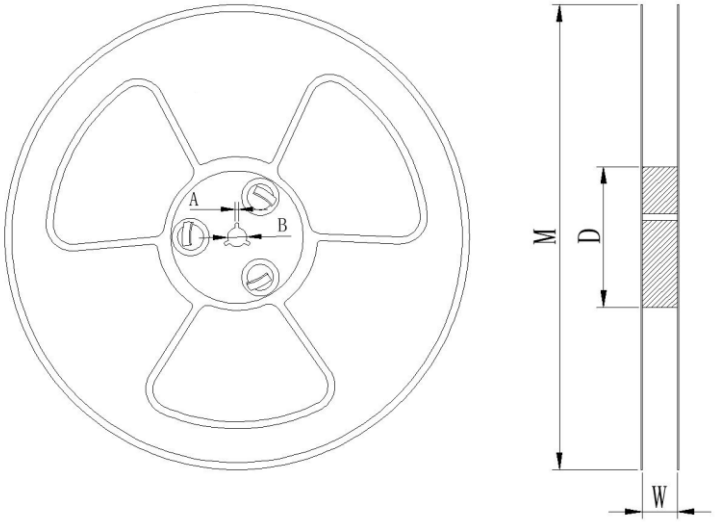


a	b	c	d	E
7.3	2.45	5.5	0.8	0.9

Packing specifications and size [mm]



A	B	W	E	F	P0	P1	P2	ØD0	T	Qty
7.3	10.9	24	1.75	11.5	4	12	2	1.5	3.8	1,000



Reel Type	W	M	A	B	D
13"reel for 24mm tape	25±1.0	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
RSKN4026	K : Karma M : Manganese copper F : Fe-Cr-Al	L200 = 0.2mΩ R001 = 1mΩ	D = ±0.5% F = ±1% J = ±5%	T0 : Tape & Reel standard B0 : without tape and reel