2725

Metal Alloy Chip Resistors

Features

- Low-resistance alloy resistor for surface mounting.
- Complies with RoHS requirements.
- Conforms to automotive AEC-Q200 tests.



Type designation

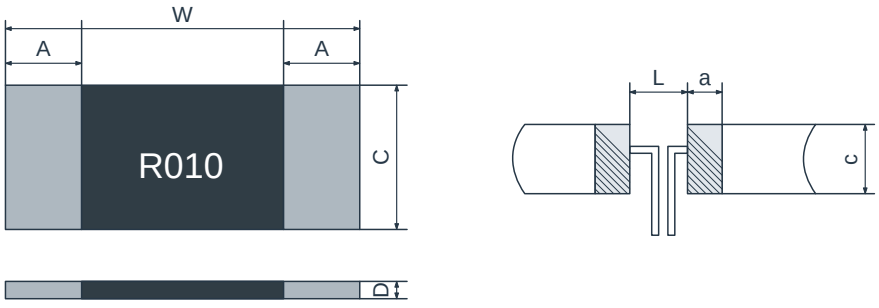
Size	Type	Rated power	Tolerance	Resistance range
2725	LE (large electrode)	4W	F:1% J:5%	0.2mΩ~3mΩ

Ordering code

Manufacturer	Size	Type	Power	Resistance	Tolerance	Quantity
INLANX	2725	LE (large electrode)	4W	R001 R002 ……	1%=F 5%=J	1 (1K)

Example: INLANX2725LE4WR001F1

Construction and dimensions (mm)



Unit: mm

Size	Power	R (mΩ)	W	C	A	D	L	a	c
2725	4W	0.2~0.25	6.8±0.25	6.5±0.25	1.7±0.25	1.2±0.1	1.32	3.18	6.86
2725	4W	0.5	6.8±0.25	6.5±0.25	1.2±0.25	1.2±0.1	1.32	2.28	6.86
2725	4W	1.0~2.0	6.8±0.25	6.5±0.25	1.2±0.25	1.2±0.1	1.32	2.28	6.86
2725	4W	3	6.8±0.25	6.5±0.25	1.0±0.25	1.2±0.1	1.32	2.28	6.86

Supplementary specifications

Parameter	Specification
Resistance range	0.2~50 mΩ
Power	2~5 W
Tolerance	±1%, ±5%
TCR	±75 / ±100 / ±200 ppm/°C

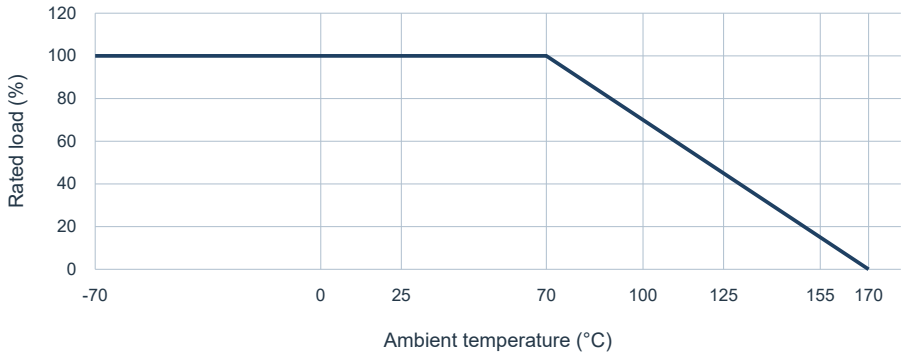
Parameter	Specification
Alloy	M: Manganin; K: Karma; F: FeCrAl
Operating temperature	-55~170°C
Low inductance	K/M: <5 nH (1 MHz); F: <20 nH (1 MHz)
Insulation resistance	≥220 MΩ (500 V DC, 1 min)
Withstand voltage	500 V
Environmental	RoHS

Electrical specifications

Type	Power	Resistance	TCR ppm/°C	Operating temp.	Tolerance	Insulation	Alloy
2725	4W	0.2mΩ~0.25 mΩ	±200	-55°C~ +170°C	F:1% J:5%	Over 100M Ω	FeCrAl Manganin Karma
2725	4W	0.5 mΩ	±100	-55°C~ +170°C	F:1% J:5%	Over 100M Ω	FeCrAl Manganin Karma
2725	4W	1 mΩ~2 mΩ	±100	-55°C~ +170°C	F:1% J:5%	Over 100M Ω	FeCrAl Manganin Karma
2725	4W	3 mΩ	±75	-55°C~ +170°C	F:1% J:5%	Over 100M Ω	FeCrAl Manganin Karma

TCR measured from 20°C to 120°C with 20°C as reference.

Power derating

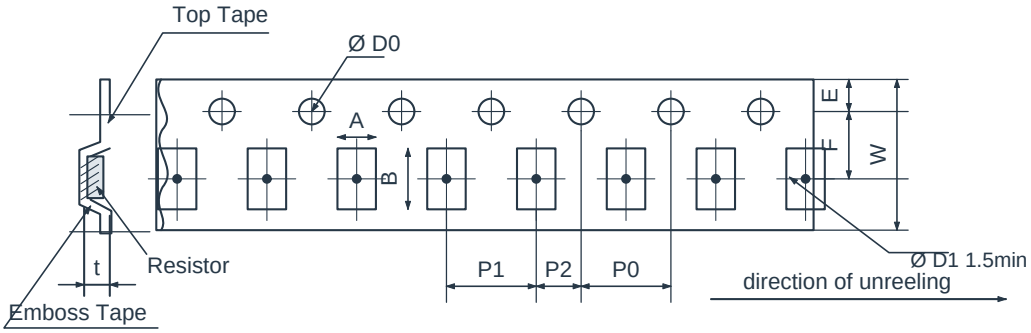


100% rated power at and below 70°C; linear derating above 70°C to zero at 170°C.

Reliability tests

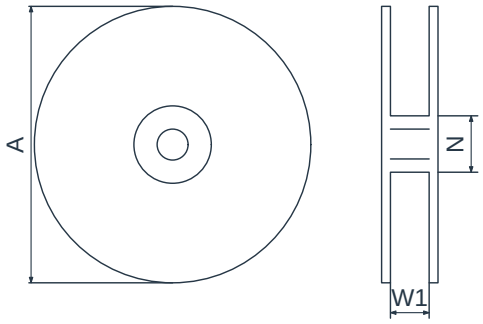
Test	Conditions / method	Reference	Limits
Temperature of Resistance	+20 ~ 120°C	IEC60115-1 4.8	-
Temperature Cycling	1000 Cycles (-55°Cto +155°C)	JESD22 Method JA-104	±1.0%
High Temperature Exposure	1000hrs.@T =170°C.Unpowered.	MIL-STD-202 Method 108	±1.0%
Biased Humidity	1000hrs 85°C/85%RH .Note: Specified conditions:10% of operating power.	MIL-STD-202 Method 103	±1.0%
Operational Life	Condition D Steady State TA =125 °Cat rated power.	MIL-STD202 Method 108	±1.0%
Solderability	245°C±, 3s	J-STD-202	95% Coverage Minimum
Resistance to Soldering Heat	260°C, 10s	MIL-STD 202 Method 210	±0.5%
Short Time Overload	5 × Rated power for 5 s	MIL-STD-202 Method 201	±1.0%
Flammability	V-0 or V-1are acceptable, Electrical test not required	AEC-Q200 REV D- Test 20 UL-94	V-0 or V1
Resistance to Solvents	Isopropyl alcohol (IPA), solvent temperature: 23±5°C , duration: 5 ±0.5 min	JIS-C5201 -1 4.29	No Visible Damage

Carrier tape dimensions (mm)



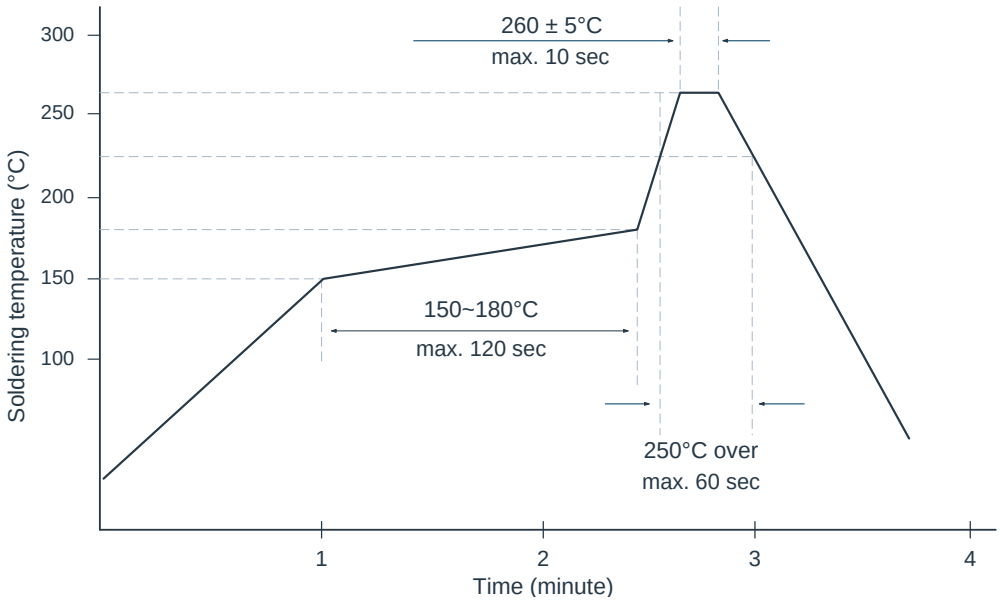
Type	A	B	W	F	E	P1	P2	P0	D0
INLANX25-W	9.8	9.6	24	11	1.75	12	2.0	4.0	1.5

Reel dimensions (mm)



Size	A±2	N±1	W1±1
INLANX25	178	60	12

Solder reflow profile



Preheat at 150-180°C for at most 120 s; above 250°C for at most 60 s; peak 260±5°C for at most 10 s.

Storage and handling

Packaging storage: 5-35°C, 40-75% RH. General storage: 25°C, 60% RH; keep humidity as low as possible. Storage life: 2 years.

Avoid prolonged direct sunlight, moisture, dust and gases that impair solderability, including hydrogen chloride, sulfurous acid gas and hydrogen sulfide.