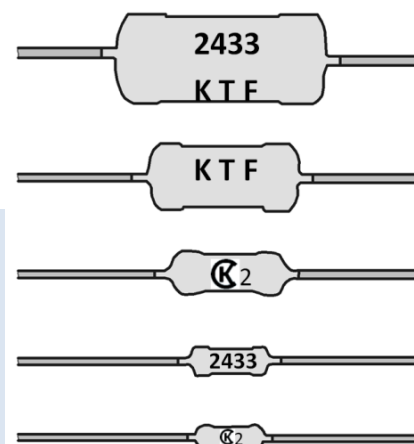


### FEATURES

- High temperature (200 °C)
- Climatic category 60/200/56

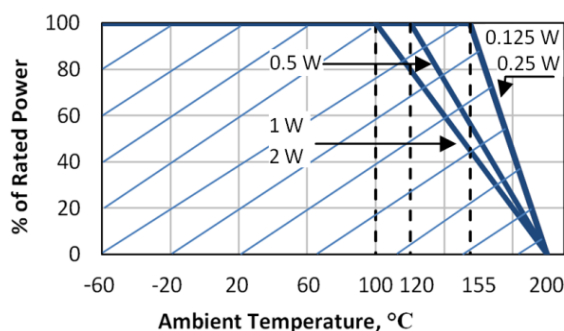
### GENERAL SPECIFICATIONS

- **Operating Temp. Range:** -60 °C to 200 °C
- **Max. Resistance Change at Rated Dissipation**  
| $\Delta R/R$  max. | after 1000 h, 20000 h
  - for resistance 200  $\Omega$  - 10 M $\Omega$  5 %
  - for resistance 0.1-200  $\Omega$  and >10 M $\Omega$  10 %
- **Package:** Leaded
- **Process:** Metal Film
- **Substrate Material:** 85 % Al<sub>2</sub>O<sub>3</sub>
- **Coating:** Enamel
- **Termination Finish:** Sn-Pb



Part Number	Size	Power (W)	Resistance Value <sup>1</sup> , (Ohms)	Resistance Tolerance ( $\pm$ %)	Max. Operating Voltage (V)	Temperature Coefficient (ppm/°C)
R1-127-0125	0207	0.125	1-10	10, 5	200	$\pm$ 500
			10.2-237K	10, 5, 2, 1		$\pm$ 500, $\pm$ 250, $\pm$ 100
			243K-3.01M	10, 5, 2, 1		$\pm$ 500, $\pm$ 250
R1-127-0250	0308	0.25	1-10	10, 5	250	$\pm$ 500
			10.2-237K	10, 5, 2, 1		$\pm$ 500, $\pm$ 250, $\pm$ 100
			243K-5.11M	10, 5, 2, 1		$\pm$ 500, $\pm$ 250
R1-127-0500	0411	0.5	0.1-1	10, 5	350	$\pm$ 1000
			1.1-10	10, 5		$\pm$ 500
			10.2-237K	10, 5, 2, 1		$\pm$ 500, $\pm$ 250, $\pm$ 100
			243K-5.11M	10, 5, 2, 1		$\pm$ 500, $\pm$ 250
R1-127-1000	0713	1.0	1-10	10, 5	500	$\pm$ 500
			10.2-237K	10, 5, 2, 1		$\pm$ 500, $\pm$ 250, $\pm$ 100
			243K-10M	10, 5, 2, 1		$\pm$ 500, $\pm$ 250
			11M-22M	10, 5		$\pm$ 1000
R1-127-2000	0919	2.0	1-10	10, 5	750	$\pm$ 500
			10.2-237K	10, 5, 2, 1		$\pm$ 500, $\pm$ 250, $\pm$ 100
			243K-10M	10, 5, 2, 1		$\pm$ 500, $\pm$ 250
			11M-22M	10, 5		$\pm$ 1000

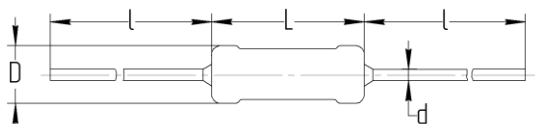
<sup>(1)</sup> E24 Series for tolerance: 5 %, 10 %; E96 Series for tolerance: 1 %, 2 %



### PART NUMBER CODE

R1-127	0125	2433	F	2
model	power	value	tolerance	TC
	0125 = 0.125 W	R100 = 0.1 $\Omega$	F = 1 %	1 = 100 ppm
	0250 = 0.25 W	2205 = 22 M $\Omega$	G = 2 %	2 = 250 ppm
	0500 = 0.5 W		J = 5 %	3 = 500 ppm
	1000 = 1 W		K = 10 %	4 = 1000 ppm
	2000 = 2 W			

## High Temperature Leaded Resistor



Part Number	Dimensions (mm)					Mass (g)
	L	ØD	l	Ød		
R1-127-0125	6 <sub>-0.6</sub>	2.2 <sub>-0.3</sub>	20 <sup>+3</sup>	0.6±0.1	0.15	
R1-127-0250	7.0 <sub>-0.7</sub>	3 <sub>-0.3</sub>	20 <sup>+3</sup>	0.6±0.1	0.25	
R1-127-0500	10.2 <sub>-0.2</sub>	4.2 <sub>-0.6</sub>	25 <sup>+3</sup>	0.8±0.1	1.0	
R1-127-1000	13.0 <sub>-1.1</sub>	6.7 <sub>-0.6</sub>	25 <sup>+3</sup>	0.8±0.1	2.0	
R1-127-2000	18.5 <sub>-1.5</sub>	8.8 <sub>-0.6</sub>	25 <sup>+3</sup>	0.8±0.1	3.5	

### PERFORMANCE CHARACTERISTICS

Test	Condition	ΔR max.
Robustness of termination	IEC60115-1 (4.16)/ IEC 60068-2-21 Bending; Tensile	± 2 % (1 %) <sup>1</sup>
Solderability	IEC60115-1 (4.17)/ IEC 60068-2-20 (235±5) °C; 2 s; solder bath method; SnPb40	Good tinning (>95 % covered, no visible damage)
Resistance to soldering heat	IEC60115-1 (4.18.2)/ IEC 60068-2-20 (260±5) °C; (5±1) s	± 2 % (1 %) <sup>1</sup> ; no visible damage
Rapid change of temperature	IEC60115-1 (4.19)/ IEC 60068-2-14 30 min at -60 °C; 30 min at 125 °C; 5 cycles (0.125 W, 0.25 W) 30 min at -60 °C; 30 min at 155 °C; 5 cycles (0.5 W) 30 min at -60 °C; 30 min at 200 °C; 5 cycles (1 W, 2 W)	± 3 % (1 %) <sup>1</sup>
Vibration	IEC60115-1 (4.22)/ IEC 60068-2-6 32 sweep cycles per direction; 100 Hz to 2000 Hz; 2 mm; 200 m/s <sup>2</sup> (0.125-0.5 W) 10 Hz to 600 Hz; 2 mm; 200 m/s <sup>2</sup> (1 W, 2 W)	± 2 % (1 %) <sup>1</sup>
Low air pressure	IEC60115-1 (4.23.5)/ IEC 60068-2-13 0,67 kPa; 30 min; 15 °C to 35 °C	No visible damage
Damp heat, steady state	IEC60115-1 (4.24)/ IEC 60068-2-78 (40±2) °C; 56 days; (93±3) % RH	± 3 % (1 %) <sup>1</sup>

<sup>(1)</sup> for tolerance 1 %

All tests are carried out in accordance with the following specifications:

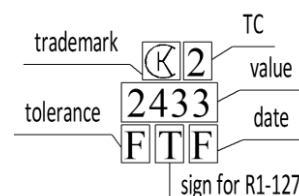
- IEC 60115-1 (clause),
- IEC 60068-2-xx (test method).

### PACKAGING

Carton box.

### MARKING

Nominal value	Marking
0.1 Ω to 0.91 Ω	R100 to R910
1 Ω to 9.1 Ω	1R00 to 9R10
10 Ω to 97.6 Ω	10R0 to 97R6
100 Ω to 976 Ω	1000 to 9760
1 kΩ to 976 kΩ	1001 to 9763
1 MΩ to 9.76 MΩ	1004 to 9764
11 MΩ to 22 MΩ	1105 to 2205



### MOUNTING PROCEDURE

Can be used only in manual assembly techniques.

#### Date

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
A	B	C	D	E	F	H	J	K	L	M	N	P	R	S	T	U	V	W	X