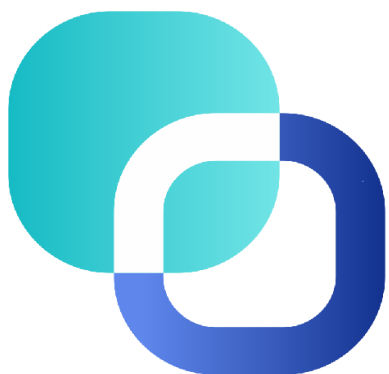




KEEN SIDE
electronics

DATA SHEET

Thick Film Chip Resistor Array

Thick Film Chip Resistor Array

1. Scope

This specification prescribes thick film chip array for use in electronics system.

2. Features

- Convex termination
- Lesser board space than chip resistors
- Reduction of assembly cost

3. Designation

2.1 Designation is made in accordance with the following coding system :-

<u>Type</u>	<u>Power</u>	<u>Value</u>	<u>Tolerance</u>	<u>Pin Code</u>
<u>KSE</u>	<u>02</u>	<u>22R</u>	<u>J</u>	<u>10 P</u>

Type	Description
02	0402
03	0603
06	1206

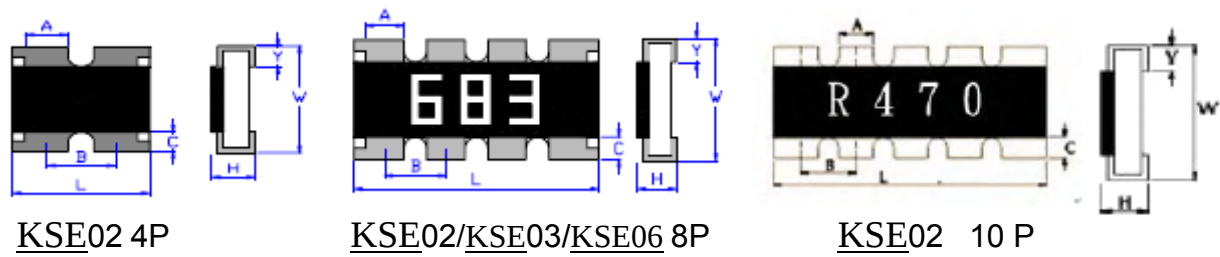
Resistance Value

F	± 1%
J	± 5%

Type	Description
4P	4P2R
8P	8P4R
10P	10P8R

Thick Film Chip Resistor Array

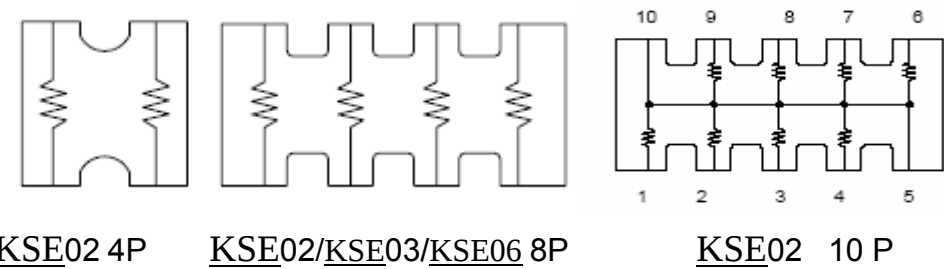
4. Finish Product Dimensions



Unit : mm

Dimensions	L	W	H	A	B	C	Y
KSE02(0402) 4P	1.00 ± 0.1	1.00 ± 0.1	0.35 ± 0.1	0.25 ± 0.1	0.65 ± 0.1	0.20 ± 0.1	0.25MAX
KSE02(0402) 8P	2.00 ± 0.1	1.00 ± 0.1	0.45 ± 0.1	0.30 ± 0.1	0.50 ± 0.1	0.22 ± 0.15	0.25MAX
KSE02(0402) 10P	3.20 ± 0.1	1.60 ± 0.1	0.55 ± 0.1	0.32 ± 0.1	0.53 ± 0.1	0.32 ± 0.1	0.25MAX
KSE03(0603) 8P	3.20 ± 0.15	1.60 ± 0.1	0.55 ± 0.1	0.50 ± 0.1	0.80 ± 0.1	0.30 ± 0.15	0.25MAX
KSE06(1206) 8P	5.10 ± 0.2	3.10 ± 0.2	0.55 ± 0.1	0.80 ± 0.2	1.27 ± 0.1	0.50 ± 0.2	0.25MAX

5. Circuit Diagrams



Thick Film Chip Resistor Array

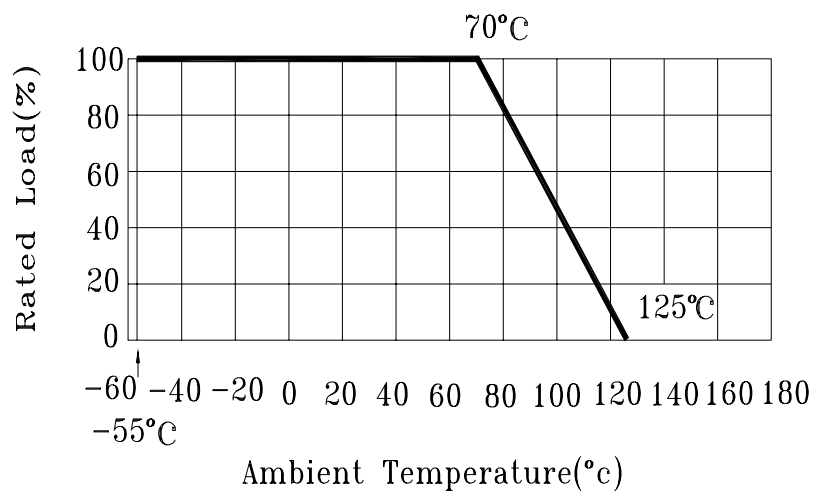
6. Characteristics

6.1 Rated Power (%)

Rated power shall be load power corresponding to normal wattage suitable for continuous use at 70°C ambient temperature in case the ambient temperature exceeds 70°C reduce the load power in accordance with the derating curve shown as

TYPE	Rated Power	Max. Working Voltage	Max. Overload Voltage
KSE02XXX4P	0.063W	50V	100V
KSE02XXX8P	0.063W	50V	100V
KSE02XXX10P	0.063W	50V	100V
KSE03XXX8P	0.1W	50V	100V
KSE06XXX8P	0.25W	50V	100V

6.2 Derating Curve



Thick Film Chip Resistor Array

7. Electrical Specifications

Category	Test Method	Test Condition	Requirement	
			+/-1%	+/-5%
Temperature Coefficient of Resistance(T.C.R)	JIS C 5201 4.8 IEC 60115-1 4.8	- 55°C ~+ 125°C, 20°C is the reference temperature	Within the specification	
Short Time Overload	JIS C 5201 4.13 IEC 60115-1 4.13	2.5 times RCWV or max. overload voltage for 5 seconds	±(1.0%+0.05Ω)	±(2.0%+0.05Ω)
Insulation Resistance	JIS C 5201 4.6 IEC 60115-1 4.6	Max overload voltage for 1 minute	≥ 10G	
Voltage Proof	JIS C 5201 4.7 IEC 60115-1 4.7	1.42 times RCWV (RMS) for 1 minute	No breakdown or flashover	
Substrate Bending Test	JIS C 5201 4.33 IEC 60115-1 4.33	Bending once for 5 seconds	±(1.0%+0.05Ω)	±(1.0%+0.05Ω)
Resistance to soldering heat	JIS C 5201 4.18 IEC 60115 4.18	260 ±5°C for 10 seconds	±(0.5%+0.05Ω)	±(1.0%+0.05Ω)
Leaching	JIS C 5201 4.18 IEC 60115 4.18	260 ±5°C for 60 seconds	No leaching	
Solderability	JIS C 5201 4.17 IEC 60115-1 4.17	245 ±3°C for 2 seconds	> 95% coverage	
Endurance at upper category temperature	JIS C 5201 2.23 IEC 60115-1 2.23.2	At + 125°C for 1000 hours	±(1.0%+0.05Ω)	±(1.5%+0.10Ω)
Rapid change of temperature	JIS C 5201 4.19 IEC 60115-1 4.19	- 55°C to + 125°C, 5 cycles	±(0.5%+0.05Ω)	±(1.0%+0.05Ω)
Damp heat with load	JIS C 5201 4.24	40±2°C, 90~95% R.H. or max working voltage for 1000 hours with 1.5 hrs "ON" and 0.5 hrs "OFF"	±(2.0%+0.10Ω)	±(3.0%+0.10Ω)
Endurance	JIS C 5201 4.25 IEC 60115-1 4.25.1	70±2°C, or max working voltage for 1000 hours with 1.5 hrs "ON" and 0.5 hrs "OFF"	±(2.0%+0.10Ω)	±(3.0%+0.10Ω)