

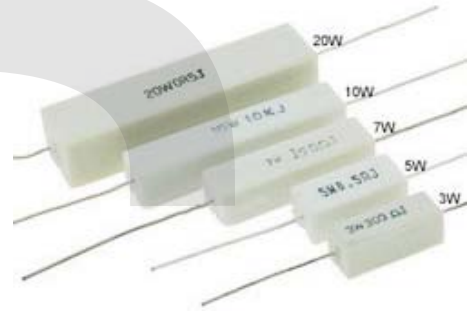
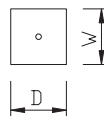
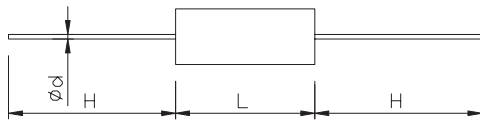
Cement Fixed Resistors Series

KLS6-SQP Cement Fixed Resistors Series

Features

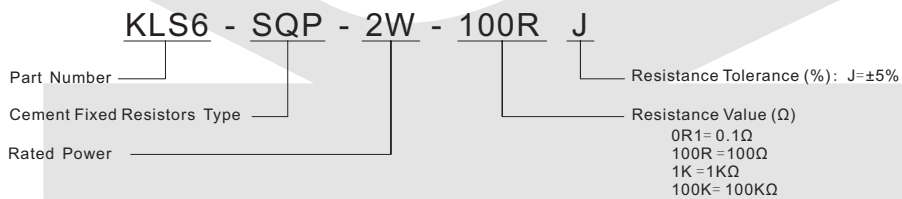
1. Good heat-durability, Low temperature coefficient, low noise, high load power, high insulating capacity, nonflammability.
2. Operating ambient temperature: -55°C ~ +275°C

Dimension (unit: mm)



| Type | Dimension (mm) | | | | | Resistance Range | |
|-------------|----------------|------|------|--------|-----|------------------|------------------|
| | W±1 | D±1 | L±1 | d±0.05 | H±5 | Wire-wound | Metal Oxide Film |
| Normal Size | | | | | | | |
| SQP-2W | 6.4 | 6.4 | 18 | 0.7 | 28 | 0.1 Ω -27 Ω | 20 Ω -40K Ω |
| SQP-3W | 8 | 8 | 22 | 0.7 | 28 | 0.1 Ω -39 Ω | 30 Ω -62K Ω |
| SQP-5W | 9.5 | 9.5 | 22 | 0.8 | 28 | 0.1 Ω -47 Ω | 40 Ω -120K Ω |
| SQP-7W | 9.5 | 9.5 | 35 | 0.8 | 35 | 0.1 Ω -680 Ω | 510 Ω -250K Ω |
| SQP-10W | 9.5 | 9.5 | 48.5 | 0.8 | 35 | 0.1 Ω -910 Ω | 820 Ω -250K Ω |
| SQP-15W | 12.5 | 12.5 | 48.5 | 0.8 | 35 | 1 Ω -1K Ω | |
| SQP-20W | 14.5 | 12.5 | 60 | 0.8 | 35 | 2 Ω -1.2K Ω | |
| SQP-25W | 14.5 | 12.5 | 64 | 0.8 | 35 | 2 Ω -1.5K Ω | |
| Small Size | | | | | | | |
| SQPS-3W | 6 | 6 | 20 | 0.6 | 28 | 0.1 Ω -27 Ω | 20 Ω -40K Ω |
| SQPS-5W | 6 | 6 | 25 | 0.7 | 35 | 0.1 Ω -100 Ω | 100 Ω -100K Ω |
| SQPS-7W | 9 | 9 | 25 | 0.8 | 35 | 0.1 Ω -100 Ω | 100 Ω -100K Ω |

ORDER INFORMATION



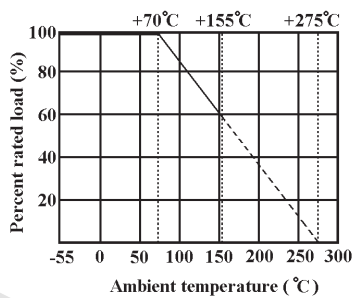
Cement Fixed Resistors Series

KLS6-SQP Cement Fixed Resistors Series

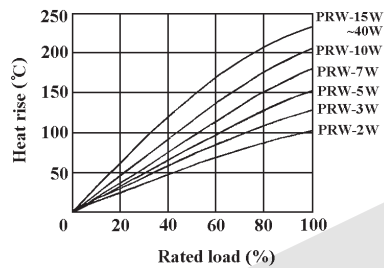


| Item | Performance requirement | Test methods |
|------------------------------|--|---|
| Temperature Coefficient | Wire coiling: $-300\text{ppm}/^{\circ}\text{C} \leq a \leq +300\text{ppm}/^{\circ}\text{C}$ | JIS5202-5.2 -55°C to +155°C |
| | Oxide rod: $-350\text{ppm}/^{\circ}\text{C} \leq a \leq +350\text{ppm}/^{\circ}\text{C}$ | T. C. R = $(R2-R1) \times 10^6 / R1 \times (T2-T1)$ (PPM/°C) |
| | | R1: Resistance value at room temperature (T1); |
| | | R2: Resistance value at room temperature + 100°C (T2) |
| Short time overload | $\Delta R \leq \pm (2\% R0 + 0.1 \Omega)$ | JIS5202-5.5 2.5 times RCWV for 5 seconds |
| Resistance to soldering heat | $\Delta R \leq \pm (1\% R0 + 0.05 \Omega)$ | JIS5202-6.4 350°C ± 10°C for 3 ± 0.5 seconds |
| Solderability | The area of soldering is over 95% | JIS5202-6.5 235°C for 5 ± 0.5 seconds |
| Temperature cycling | $\Delta R \leq \pm (5\% R0 + 0.1 \Omega)$ | JIS5202-7.4 → 65°C → room temp. → 150°C → room temp. for 5 cycles |
| Load life in moisture | $\Delta R \leq \pm (5\% R0 + 0.1 \Omega)$ | JIS5202-7.9 40 ± 2°C, 90 ~ 95% RH at RCWV for 1000 hrs. (1.5 hrs. on, 0.5 hrs. off) |
| Nonflammability | No visible flame | SJ3272-4.2 |

Derating Curve



Heat Rise Chart



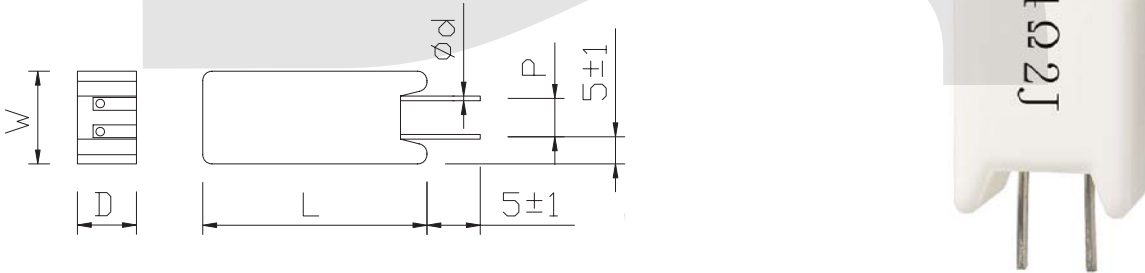
Cement Fixed Resistors Series

KLS6-SQM Cement Fixed Resistors Series

Features

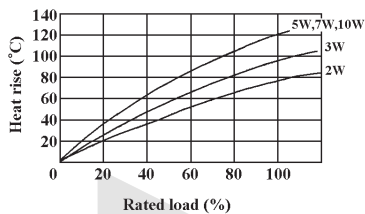
1. Good heat-durability, Low temperature coefficient, low noise, high load power, high insulating capacity, nonflammability.
2. Operating ambient temperature: -55°C ~ +275°C

Dimension (unit: mm)



| Type | Dimension (mm) | | | | | Resistance Range | |
|-------------|----------------|-----|-----|--------|-----|------------------|------------------|
| | W±1 | D±1 | L±1 | d±0.05 | P±1 | Wire-wound | Metal Oxide Film |
| Normal Size | | | | | | | |
| SQM-2W | 11.5 | 7.5 | 20 | 0.7 | 5 | 0.1Ω-27Ω | 20Ω-40KΩ |
| SQM-3W | 12.5 | 8.5 | 25 | 0.7 | 5 | 0.1Ω-39Ω | 30Ω-62KΩ |
| SQM-5W | 12.5 | 9 | 25 | 0.8 | 5 | 0.1Ω-47Ω | 40Ω-120KΩ |
| SQM-7W | 12.5 | 9 | 38 | 0.8 | 5 | 0.1Ω-680Ω | 510Ω-250KΩ |
| SQM-10W | 12.5 | 9 | 50 | 0.8 | 5 | 0.1Ω-910Ω | 820Ω-250KΩ |
| Small Size | | | | | | | |
| SQMA-5W | 12.5 | 9 | 25 | 0.8 | 7.5 | 0.1Ω-47Ω | 40Ω-120KΩ |
| SQMA-7W | 12.5 | 9 | 38 | 0.8 | 7.5 | 0.1Ω-680Ω | 510Ω-250KΩ |
| SQMA-10W | 16 | 12 | 35 | 0.8 | 7.5 | 0.1Ω-910Ω | 820Ω-250KΩ |

Heat Rise Chart



ORDER INFORMATION

KLS6 - SQM - 2W - 100R J

Part Number ————

Cement Fixed Resistors Type ————

Rated Power ————

Resistance Tolerance (%): J=±5%

Resistance Value (Ω)
 0R1= 0.1Ω
 100R = 100Ω
 1K = 1KΩ
 100K = 100KΩ

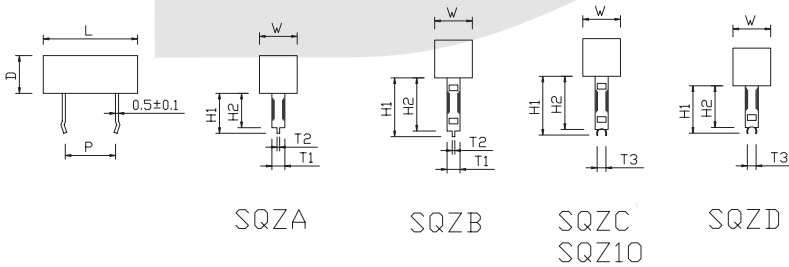
Cement Fixed Resistors Series

KLS6-SQZ Cement Fixed Resistors Series

Features

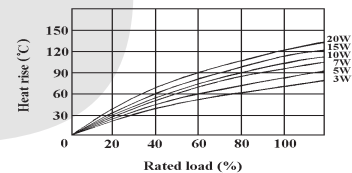
1. Good heat-durability, Low temperature coefficient, low noise, high load power, high insulating capacity, nonflammability.
2. Operating ambient temperature: -55°C ~ +275°C

Dimension (unit: mm)



| Type | Dimension (mm) | | | | | | | | | Resistance Range | |
|----------|----------------|------|--------|--------|------|--------|--------|------|------|------------------|------------------|
| | W±1 | D±1 | L | P±1.5 | T1±1 | T2±0.2 | T3±0.5 | H1±2 | H1±2 | Wire-wound | Metal Oxide Film |
| SQZA-3W | 10 | 9 | 22±1 | 9.5 | 7 | 1.6 | - | 24 | 10 | 0.1Ω-47Ω | 48Ω-40KΩ |
| SQZB-3W | | | | | | 1.6 | - | 39 | 25 | | |
| SQZC-3W | | | | | | 1.5 | 3.5 | 36 | 22 | | |
| SQZD-3W | | | | | | 1.3 | 3.5 | 24 | 10 | | |
| SQZA-5W | 10 | 9 | 27/25 | 15/8.5 | 7 | 1.6 | - | 24 | 10 | 0.1Ω-120Ω | 121Ω-62KΩ |
| SQZB-5W | | | 1.6 | - | | 39 | 25 | | | | |
| SQZC-5W | | | 1.5 | 3.5 | | 36 | 22 | | | | |
| SQZ10-5W | | | 1.3 | 3.5 | | 39 | 24 | | | | |
| SQZD-5W | | | 1.3 | 3.5 | | 24 | 10 | | | | |
| SQZA-7W | 10 | 9 | 35±1 | 22 | 7 | 1.6 | - | 24 | 10 | 0.1Ω-560Ω | 561Ω-120KΩ |
| SQZB-7W | | | | | | 1.6 | - | 39 | 25 | | |
| SQZC-7W | | | | | | 1.5 | 3.5 | 36 | 22 | | |
| SQZ10-7W | | | | | | 1.3 | 3.5 | 39 | 24 | | |
| SQZD-7W | | | | | | 1.3 | 3.5 | 24 | 10 | | |
| SQZA-10W | 10 | 9 | 48±1.5 | 35/32 | 7 | 1.6 | - | 24 | 10 | 0.1Ω-820Ω | 820Ω-120KΩ |
| SQZB-10W | | | | | | 1.6 | - | 39 | 25 | | |
| SQZC-10W | | | | | | 1.5 | 3.5 | 36 | 22 | | |
| SQZD-10W | | | | | | 1.3 | 3.5 | 24 | 10 | | |
| SQZA-15W | 12.5 | 11.5 | 48±1.5 | 32 | 10 | 3 | - | 35 | 15 | 1Ω-1KΩ | - |
| SQZB-15W | | | | | | 3 | - | 47 | 30 | | |
| SQZC-15W | | | | | | 2 | 5 | 47 | 30 | | |
| SQZA-20W | 12.5 | 13.5 | 63±1.5 | 45 | 10 | 3 | - | 35 | 15 | 1Ω-1.5KΩ | - |
| SQZB-20W | | | | | | 3 | - | 47 | 30 | | |
| SQZC-20W | | | | | | 2 | 5 | 47 | 30 | | |

Heat Rise Chart



ORDER INFORMATION

KLS6 - SQZA - 3W - 100R J

Part Number

Cement Fixed Resistors Type

Rated Power

Resistance Tolerance (%): J=±5%

Resistance Value (Ω)

0R1= 0.1Ω
100R = 100Ω
1K = 1KΩ
100K = 100KΩ