

■ INTRODUCTION

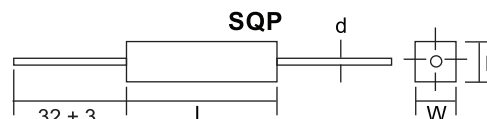
Cement-Box type resistors offer a choice of resistive elements inside a white flameproof cement box. In addition to being flameproof, these resistors are also non-corrosive and humidity resistant. The available resistive elements are:

SQP____ - Standard wire wound
(all welded construction)
MSQP____ - Metal oxide core
(low inductance, high resistance)
NSQP____ - Non-Inductively wound
(Ayrton-Perry Method, all welded construction)

Operating temperature range, by element material

- Wire wound : -55°C ~ + 155°C
- Metal oxide : -30°C ~ + 155°C

■ DIMENSION (mm) & RESISTANCE RANGE



Series	Dimension (mm)				Resistance Range		Max. Working Voltage (V)
					Wire Wound	Metal Oxide	
	W ± 1	H ± 1	L ± 1.5	d ± 0.03	SQP_	MSQP_	
SQP2W	7	7	18	0.65	0.1Ω ~ 50Ω	50Ω ~ 100KΩ	150
SQP3W	8	8	22	0.8	0.1Ω ~ 50Ω	50Ω ~ 100KΩ	300
SQP4W	6	6	25	0.8	0.1Ω ~ 50Ω	50Ω ~ 100KΩ	300
SQP5W	9.5	9	22	0.8	0.1Ω ~ 68Ω	50Ω ~ 100KΩ	350
SQP7W SQP10WS	9.5	9	35	0.8	0.1Ω ~ 990Ω	100Ω ~ 50KΩ	500
SQP10W SQP15WS	9.5	9	48	0.8	0.1Ω ~ 990Ω	100Ω ~ 50KΩ	500
SQP15W	12.5	12	48	0.8	0.1Ω ~ 990Ω	100Ω ~ 150KΩ	500
SQP20W	14	13	60	0.8	0.1Ω ~ 990Ω	100Ω ~ 150KΩ	500
SQP25W	14	13	60	0.8	0.1Ω ~ 990Ω	100Ω ~ 150KΩ	1000
SQP30W	18	17	77	0.8	0.1Ω ~ 500Ω	100Ω ~ 150KΩ	1000
SQP40W	19	18	90	0.8	0.1Ω ~ 500Ω	100Ω ~ 150KΩ	1000
SQP50W	19	18	90	0.8	0.1Ω ~ 500Ω	100Ω ~ 150KΩ	1000

1. Resistance Range for standard resistance, special or extended range may be available upon request
2. Non-inductive type up to 20Ω only

■ PART NUMBER EXAMPLE

MSQP 5W - 47K - J

Series: MSQP
Size Code: 5W
Resistance: 47K
Tolerance: J

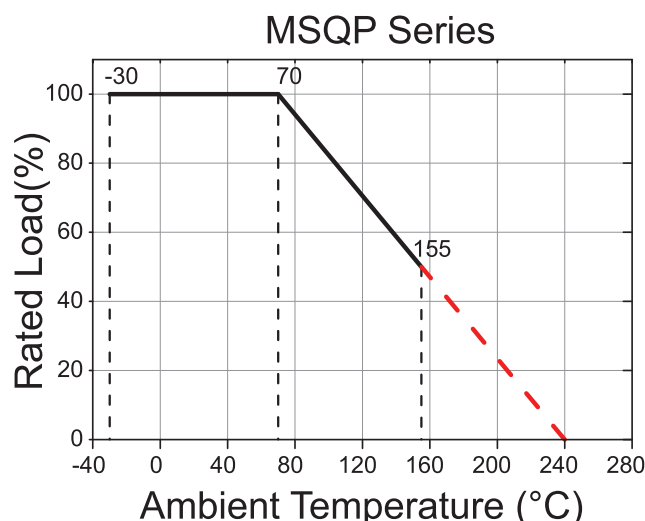
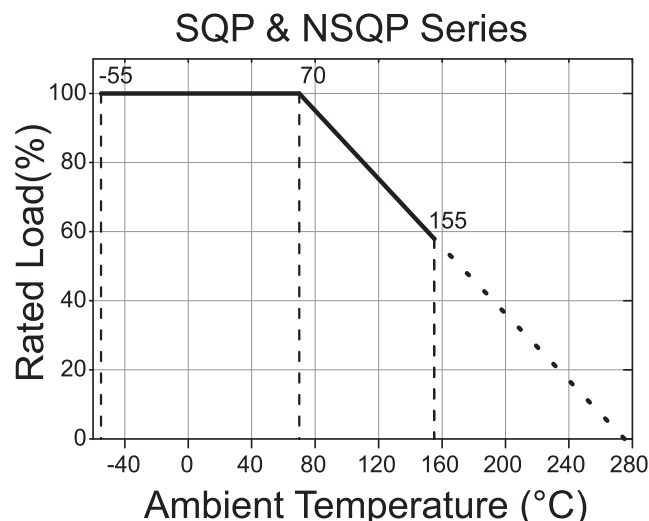
■ RESISTANCE RANGE

Ohms	0.22	2.0	22	220	2.2K	22K
Code	0R22	2R0	22R	220R	2K2	22K

■ TOLERANCE

Tolerance	± 1%	± 2%	± 5%	± 10%
Code	F	G	J	K

■ POWER DERATING CURVE



■ ELECTRICAL CHARACTERISTICS

Test Items	Method	SQP & NSQP	MSQP
Short Time Overload	JIS-C-5202 5.5 10 times RCWV for 5 seconds	±(2%+0.05Ω)	±(0.25%+0.05Ω)
Temperature Coefficient	Resistance value at room temperature and room temperature +100°C	±400ppm	±200ppm
Load Life	JIS-C-5202 7.10 70°C at RCWV for 1000hrs (1.5hrs on; 0.5hrs off)	±(5%+0.05Ω)	±(1.5%+0.05Ω)
Load Life in Humidity	JIS-C-5202 7.9 40 ± 2°C, 90~95% RH at RCWV for 1000 hrs (1.5hrs on ; 0.5hr off)	±(5%+0.05Ω)	±(1.5%+0.05Ω)
Solder Ability	JIS-C-5202 6.5 235 ± 5°C for 2 ± 0.5 seconds	95% min. Coverage	95% min. Coverage
Pulse Overload	JIS-C-5202 5.8	Max. 1500V	Max. 1500V
	4 times RCWV for 10,000 cycles (1 sec. on; 25 secs. Off)	±(1%+0.05Ω)	±(1%+0.05Ω)
Dielectric Withstanding Voltage		Max. 1000V	Max. 1000V

Rated continuous Working Voltage (RCWV) = $\sqrt{\text{POWER.RATING.} \times \text{RESISTANCE.VALUE}}$