

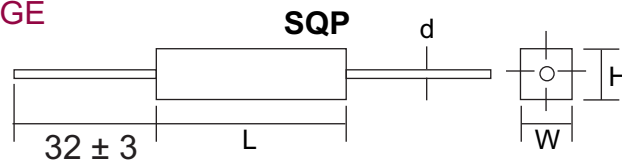
INTRODUCTION

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 proof. The available resistive elements are:

- SQ ____ - Standard wire wound
(all welded construction)
- MSQ ____ - Metal oxide core
(low inductance, high resistance)
- NSQ ____ - Non-Inductively wound
(Ayrton-Perry Method, all welded construction)

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

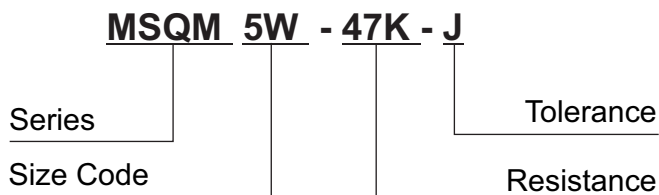
DIMENSION (mm) & RESISTANCE RANGE



Series	Dimension (mm)				Resistance Range		Max. Working Voltage (V)
	W	H	L	d	Wire Wound	Metal Oxide	
					SQ_	MSQ_	
SQP2W	7 ± 0.2	7 ± 0.2	18 ± 0.1	0.7 ± 0.05	0.1Ω ~ 50Ω	50Ω ~ 20KΩ	150
SQP3W	8 ± 0.2	8 ± 0.2	22 ± 0.1	0.8 ± 0.05	0.1Ω ~ 50Ω	50Ω ~ 33KΩ	300
SQP4W	6 ± 0.2	6 ± 0.2	25 ± 0.1	0.8 ± 0.05	0.02Ω ~ 50Ω	50Ω ~ 33KΩ	300
SQP5W	9.5 ± 0.2	9 ± 0.2	22 ± 0.1	0.8 ± 0.05	0.1Ω ~ 50Ω	50Ω ~ 50KΩ	350
SQP7W	9.5 ± 0.2	9 ± 0.2	35 ± 0.1	0.8 ± 0.05	0.1Ω ~ 100Ω	100Ω ~ 50KΩ	500
SQP10W	9.5 ± 0.2	9 ± 0.2	48 ± 0.1	0.8 ± 0.05	0.1Ω ~ 100Ω	100Ω ~ 50KΩ	500
SQP15W	12.5 ± 0.2	12 ± 0.2	48 ± 0.1	0.8 ± 0.05	0.1Ω ~ 100Ω	100Ω ~ 150KΩ	500
SQP20W	14 ± 0.2	13 ± 0.2	60 ± 0.1	0.8 ± 0.05	0.1Ω ~ 100Ω	100Ω ~ 150KΩ	500
SQP25W	14 ± 0.2	13 ± 0.2	60 ± 0.1	0.8 ± 0.05	0.1Ω ~ 100Ω	100Ω ~ 150KΩ	1000
SQP30W	18 ± 0.2	17 ± 0.2	77 ± 0.1	0.8 ± 0.05	0.1Ω ~ 500Ω	100Ω ~ 150KΩ	1000
SQP40W	19 ± 0.2	18 ± 0.2	90 ± 0.1	0.8 ± 0.05	0.1Ω ~ 500Ω	100Ω ~ 150KΩ	1000
SQP50W	19 ± 0.2	18 ± 0.2	90 ± 0.1	0.8 ± 0.05	0.1Ω ~ 500Ω	100Ω ~ 150KΩ	1000

- Resistance Range for standard resistance, below or over this resistance range on request.
- Non-inductive type up to 20Ω only

PART NUMBER EXAMPLE



RESISTANCE RANGE

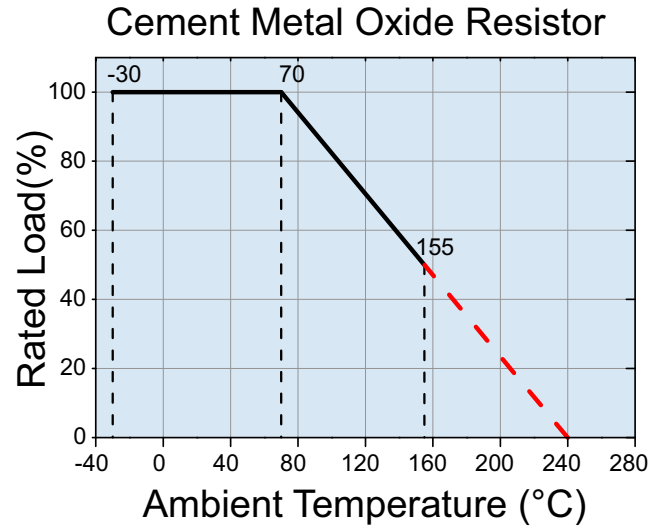
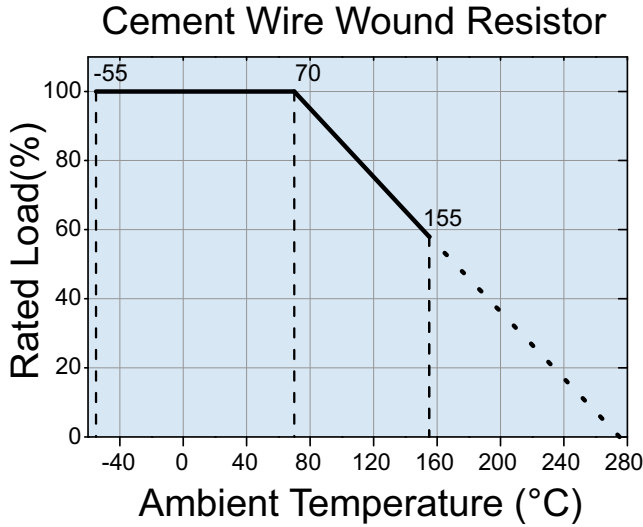
Ohms	0.22	2.0	22	220	2.2K	22K
Code	0R22	2R0	22R	220R	2K2	22K

TOLERANCE other tolerance on request

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

NOTE: All Specifications subject to change without notice.

■ **POWER DERATING CURVE**



■ **ELECTRICAL CHARACTERISTICS**

Test Items	Method	Wire Wound	Metal Oxide
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°C ± 5% RH (1.5hrs on; 0.5hrs 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) = $\sqrt{POWER.RATING.* RESISTANCE.VALUE}$

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