

INTRODUCTION

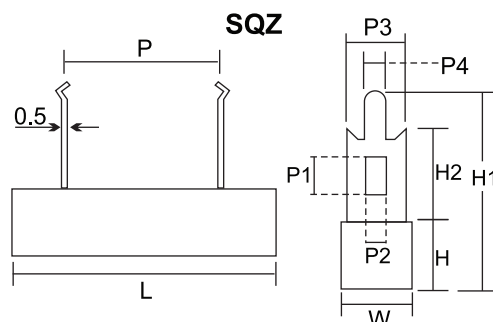
Cement-Box type resistors offer a choice of resistive elements inside a white flameproof cement box. In addition to being flameproof, these resistors are also non-corrosive and humidity proof. The available resistive elements are:

- 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

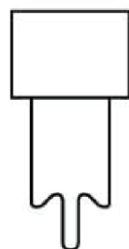
- Wire wound : -55°C ~ + 155°C
- Metal oxide : -30°C ~ + 155°C

DIMENSION (mm) & RESISTANCE RANGE

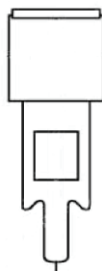


Series	Dimension (mm)										Resistance Range	
											Wire Wound	Metal Oxide
	L	H	W	P	H1	H2	P1	P2	P3	P4	SQ_	MSQ_
SQZ3WS	25	9.5	9.5	10	24	9.5	4	2	7	1.4	0.1Ω ~ 50Ω	50Ω ~ 33KΩ
SQZ5WS	25	9.5	9.5	10	24	9.5	4	2	7	1.4	0.1Ω ~ 50Ω	50Ω ~ 50KΩ
SQZ5W	27	9.5	9.5	15	24	9.5	4	2	7	1.4	0.1Ω ~ 100Ω	100Ω ~ 50KΩ
SQZ7W	35	9.5	9.5	22.5	24	9.5	4	2	7	1.4	0.1Ω ~ 500Ω	500Ω ~ 50KΩ
SQZ10W	48	9.5	9.5	32.5	24	9.5	4	2	7	1.4	0.2Ω ~ 500Ω	500Ω ~ 50KΩ
SQZ15W	48	12.5	12.5	32.5	34.5	15	7	6	10	2.7	0.5Ω ~ 500Ω	500Ω ~ 150KΩ
SQZ20W	63.5	12.5	12.5	42.5	34.5	15	7	6	10	2.7	1Ω ~ 50Ω	500Ω ~ 150KΩ

1. Resistance Range for standard resistance, below or over this resistance range on request.
2. Non-inductive type up 50Ω only
3. Different terminals are available on request. For examples:



U type



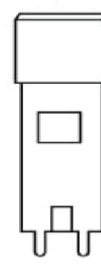
V type



W type



X type

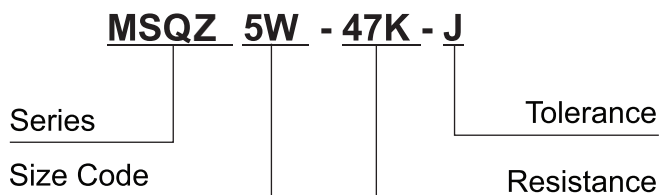


Y type



Z type

PART NUMBER EXAMPLE



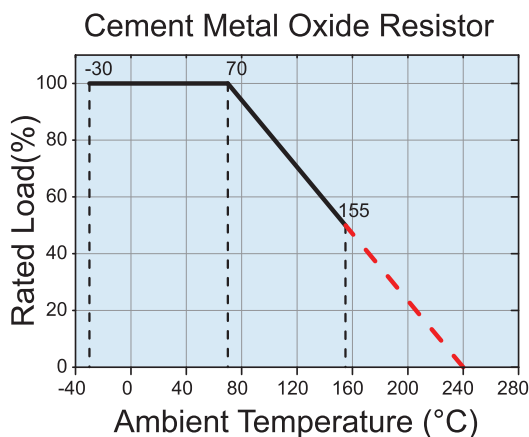
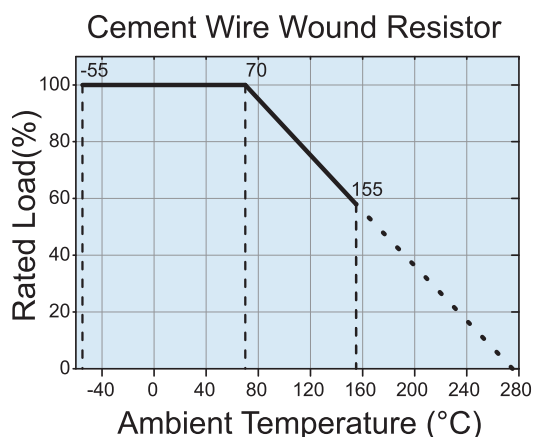
RESISTANCE RANGE

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

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 ± 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 4 times RCWV for 10,000 cycles (1 sec. on; 25 secs. Off)	Max. 1500V ±(1%+0.05Ω)	Max. 1500V ±(1%+0.05Ω)
Dielectric Withstanding Voltage		Max. 1000V	Max. 1000V

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