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(wholly owned by Hong Kong Resistors Manufactory International Ltd.)

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AN ISO 14001 : 2004 MANUFACTURER

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DATA SHEET

Name of Product : CEMENT TYPE RESISTOR (SQM)

Sales Executive : _____

Date: _____

製造 Prepared by	檢驗 Inspected by	審核 Audited by	核准 Authorized by
客戶 customer approval	客戶 customer approval	客戶 customer approval	客戶 customer approval

Spec. No.SQM 2015

Rev. No.: 2015 May.(1)

PRODUCT : CEMENT TYPE RESISTOR

TYPE : SQM-2W/3W/5W/7W/10W

1. APPLICABLE SCOPE :

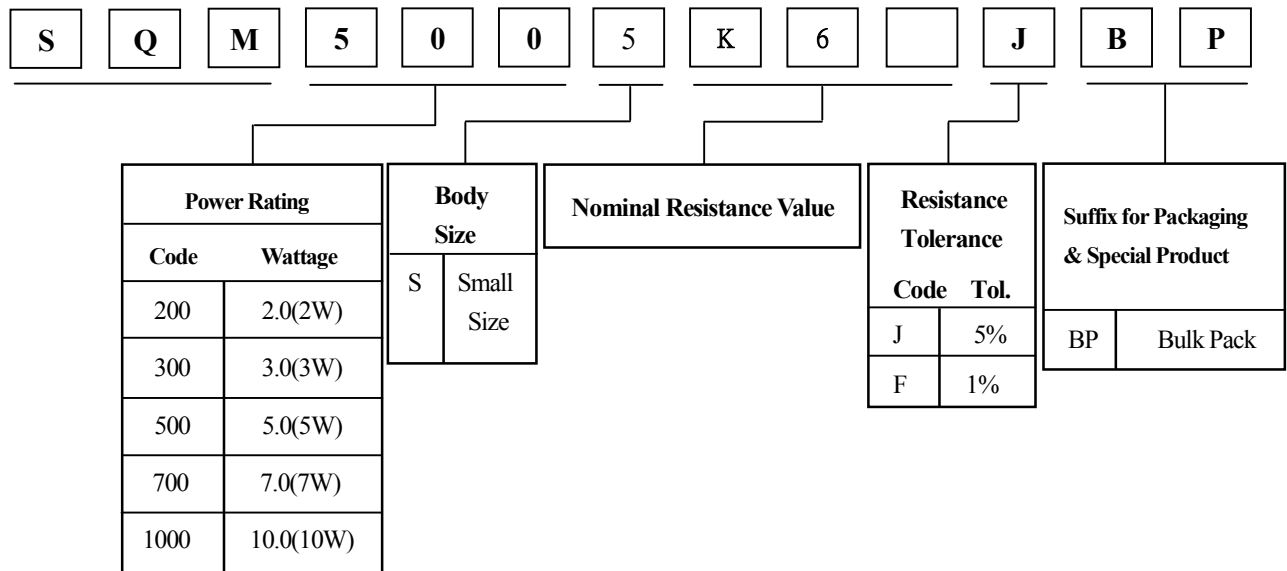
- 1.1 This specification is for use in CEMENT TYPE RESISTOR
- 1.2 Characteristics and Specifications are according to those of :

JIS C 5202

2. TYPE

It is composed of description , rated wattage , nominal resistance , tolerance and packaging.

2.1 Explanation of part numbers :



2.2 Example of expression :

Miniature type (small size) is available.

Part Number

Description

SQM 5005.6KJ BP

Cement Type Resistor, 5W,5K6, ±5% tolerance , bulk pack.

PRODUCT : CEMENT TYPE RESISTOR

TYPE : SQM-2W/3W/5W/7W/10W

3. SPECIFICATIONS

TABLE - 1

DESCRIPTION 內容	SQM200	SQM 300	SQM 500	SQM 700	SQM 000
POWER RATING AT 70°C 額定功率(70°C)	2W	3W	5W	7W	10W
OPERATING TEMP.RANGE 使用溫度範圍	-40°C~+155°C	-40°C~+155°C	-40°C~+155°C	-40°C~+155°C	-40°C~+155°C
TEMPERATURE COEFFICIENT 溫度特性	±350PPM	±350PPM	±350PPM	±350PPM	±350PPM
INSULATION RESISTANCE 絕緣電阻	MIN. 20 M Ω	MIN. 20 M Ω	MIN. 20 M Ω	MIN. 20 M Ω	MIN. 20 M Ω
HUMIDITY 耐濕負荷壽命	±(5%R+0.05 Ω)	±(5%R+0.05 Ω)	±(5%R+0.05 Ω)	±(5%R+0.05 Ω)	±(5%R+0.05 Ω)
SHORT-TIME OVERLOAD 短時間過負荷	±(2.5%R+0.05 Ω)	±(2.5%R+0.05 Ω)	±(2.5%R+0.05 Ω)	±(2.5%R+0.05 Ω)	±(2.5%R+0.05 Ω)
SOLDERABILITY 焊錫性	MIN.75% COVERED	MIN.75% COVERED	MIN.75% COVERED	MIN.75% COVERED	MIN.75% COVERED
LOAD LIFE 負載壽命	±(5%R+0.1 Ω)	±(5%R+0.1 Ω)	±(5%R+0.1 Ω)	±(5%R+0.1 Ω)	±(5%R+0.1 Ω)
FLAME RETARDANT 不燃性	NO FLAMING	NO FLAMING	NO FLAMING	NO FLAMING	NO FLAMING

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4. CHARACTERISTICS :

TABLE - 2

DC RESISTANCE VALUE	TEST METHOD MIL-STD-202 ITEM 303	TEMPERATURE 25°C ± 2°C. AQL 0.25%.
SHORT TIME OVERLOAD	TEST METHOD JIS C 5202 ITEM 5.5	RATED VOLTAGE × 2.5 TIMES OR MAX.WORKINGVOLTAGE × 2 TIMES. ABOVE TEST 5 SEC. THE RESISTANCE VALUE CHANGE RATE SHALL BE WITHIN ±(2.5%R+0.05 Ω).
SOLDERABILITY OF TERMINAL	TEST METHOD MIL-STD-202 ITEM 210	260°C ± 5°C 10 ± 1 SEC. AFTER TESTING, LEAVE FOR 3 HOURS. THE RESISTANCE VALUE CHANGE RATE SHALL BE WITHIN ±(1%R+0.05 Ω).
VIBRATION WITHSTAND	TEST METHOD MIL-STD-202 ITEM 204	X, Y, Z-EACH DIRECTION 2 HOURS. AMPLITUDE 0.75MM. RANGE : 10HZ ~ 500HZ. THE RESISTANCE VALUE CHANGE RATE SHALL BE WITHIN ±(1%R+0.05 Ω).
LOAD LIFE	TEST METHOD MIL-STD-202 ITEM 108	70°C ± 2°C. 1000 HOURS RATED VOLTAGE (1.5 HOURS ON, 0.5 HOUR OFF). THE RESISTANCE VALUE CHANGE RATE SHALL BE WITHIN ±(5%R+0.1 Ω).
RESISTANCE TEMPERATURE COEFFICIENT	TEST METHOD MIL-STD-202 ITEM 304	THE RESISTANCE VALUE CHANGE RATE SHALL BE AS TABLE - 3.
LOAD LIFE IN HUMIDITY	TEST METHOD MIL-STD-202 ITEM 103	THE RESISTANCE VALUE CHANGE RATE SHALL BE WITHIN ±(5%R+0.05 Ω).

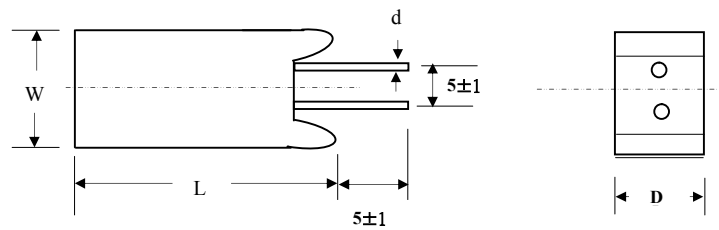
NOTE : RESISTORS SHALL BE EXAMINED FOR EVIDENCE OF NO MECHANICAL DAMAGE,
ARCING AND BREAKDOWN AFTBER THE TEST.

PRODUCT : CEMENT TYPE RESISTOR

TYPE : SQM-2W/3W/5W/7W/10W

5. SQM TYPE DIMENSIONS :

TABLE - 3



Unit : mm

TYPE	W±1	D±1	L±1	d±0.05	RESISTANCE VALUE RANGE 阻值範圍	
					WIREWOUND RODS	VALUE CUT RODS
SQM200	11.5	7.5	21	0.55	0.1 Ω - 50 Ω	51 Ω - 24K Ω
SQM300	12	8	25	0.75	0.1 Ω - 50 Ω	51 Ω - 50K Ω
SQM500	13	9	25	0.75	0.1 Ω - 50 Ω	51 Ω - 50K Ω
SQM700	13	9	39.5	0.75	0.1 Ω - 50 Ω	51 Ω - 50K Ω
SQM1000	13	9	50	0.75	0.1 Ω - 50 Ω	51 Ω - 50K Ω