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 :

MIL-STD-105
MIL-STD-202
JIS C 5202
GB 5731-85
IEC 115-2-1-1982
QC 400101

2. TYPE

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

2.1 Explanation of part numbers :

1	2	3	4	5	6	7	8	9	10	11	12	13
S	**Q**	**M**	**2**	**0**	**0**		**1**	**0**	**E**	**J**	**B**	**P**

Power Rating	
Code	**Wattage**
200	2.0(2W)
300	3.0(3W)
500	5.0(5W)
700	7.0(7W)
1000	10.0(10W)

Body Size	
S	Small Size

Nominal Resistance Value

Resistance Tolerance	
Code	**Tol.**
J	5%
K	10%

Suffix for Packaging & Special Product	
BP	Bulk Pack

2.2 Example of expression :

Miniature type (small size) is available.

Part Number	Description
SQM 200 10E J BP	Cement Type Resistor, 2W, 10Ω , ±5% tolerance , bulk pack.

PRODUCT : CEMENT TYPE RESISTOR | **TYPE : SQM-2W/3W/5W/7W/10W**

3. SPECIFICATIONS

TABLE - 1

DESCRIPTION 內容	WBA200	WBA300	WBA500	WBA700	WBA1000
POWER RATING AT 70℃ 額定功率(70℃)	2W	3W	5W	7W	10W
OPERATING TEMP.RANGE 使用溫度范圍	-40℃~ +155℃	-40℃~ +155℃	-40℃~ +155℃	-40℃~ +155℃	-40℃~ +155℃
TEMPERATURE COEFFICIENT 溫度特性	±350PPM	±350PPM	±350PPM	±350PPM	±350PPM
INSULATION RESISTANCE 絕緣電阻	MIN. 20 MΩ	MIN. 20 MΩ	MIN. 20 MΩ	MIN. 20 MΩ	MIN. 20 MΩ
HUMIDITY 耐濕負荷壽命	±(5%R+0.05Ω)	±(5%R+0.05Ω)	±(5%R+0.05Ω)	±(5%R+0.05Ω)	±(5%R+0.05Ω)
SHORT-TIME OVERLOAD 短時間過負荷	±(2.5%R+0.05Ω)	±(2.5%R+0.05Ω)	±(2.5%R+0.05Ω)	±(2.5%R+0.05Ω)	±(2.5%R+0.05Ω)
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+0.1Ω)	±(5%R+0.1Ω)	±(5%R+0.1Ω)	±(5%R+0.1Ω)	±(5%R+0.1Ω)
FLAME RETARDANT 不燃性	NO FLAMING	NO FLAMING	NO FLAMING	NO FLAMING	NO FLAMING

PRODUCT : CEMENT TYPE RESISTOR	**TYPE : SQM-2W/3W/5W/7W/10W**

4. CHARACTERISTICS :

TABLE – 2

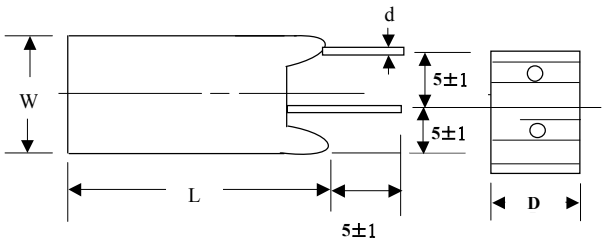
DC RESISTANCE VALUE	TEST METHOD MIL-STD-202 ITEM 303	TEMPERATURE 25℃±2℃. AQL 0.25%.
SHORT TIME OVERLOAD	TEST METHOD JIS C 5202 ITEM 5.5	RATED VOLTAGE × 2.5 TIMES OR MAX.WORKINGVOLTAGE × 2 TIMES. ABOVE TEST 5 SEC. THE RESISTANCE VALUE CHANGE RATE SHALL BE WITHIN ±(2.5%R+0.05 Ω).
SOLDERABILITY OF TERMINAL	TEST METHOD MIL-STD-202 ITEM 210	260℃±5℃ 10±1SEC. 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℃±2℃. 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 阻值范圍	
					WIREWOUND RODS	VALUE CUT RODS
SQM200	11.5	7.5	21	0.60	0.1Ω - 50Ω	51Ω - 24KΩ
SQM300	12	8	25	0.78	0.1Ω - 50Ω	51Ω - 50KΩ
SQM500	13	9	25	0.78	0.1Ω - 50Ω	51Ω - 50KΩ
SQM700	13	9	39.5	0.78	0.1Ω - 50Ω	51Ω - 50KΩ
SQM1000	13	9	50	0.78	0.1Ω - 50Ω	51Ω - 50KΩ