Cement Resistors

AXIAL LEAD TYPE

Standard Type[SQP Series], Non-Inductive Type[NSP Series]

INTRODUCTION

- The materials used and the construction techniques ensure excellent flame resistance, arc resistance and moisture resistances as well as self-extinguishing capabilities. They will withstand the most rigorous loading test
- As resistors in radio and television receivers, the hazardous conditions of smoking and redheat can be completely prevented by the proper choice of power resistors

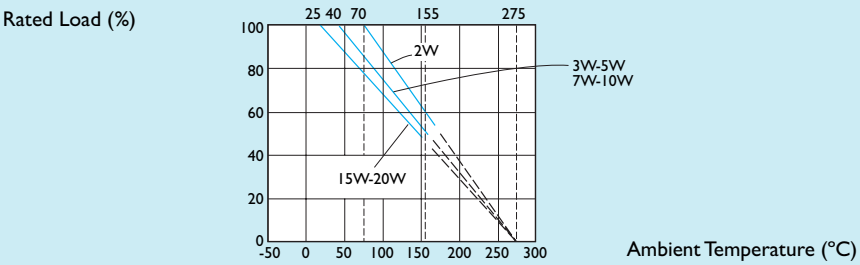
FEATURES

Exceptionally Small and Sturdy; Mechanically Safe. Excellent Electrical Characteristics

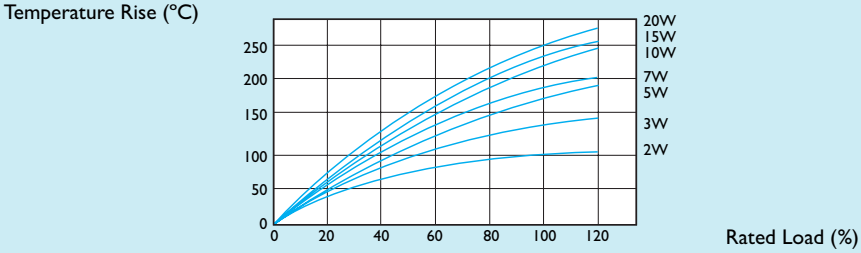
Resistance Tolerance: ±5%

Applicable Specifications: EIA RS-344 and EIA RC-649

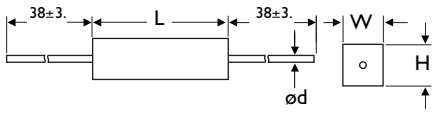
DERATING CURVE



TEMPERATURE RISE



DIMENSIONS



Unit : mm

STYLE	L	W	H	ød
SQP200	18±1.0	6.5±1.0	6.5±1.0	0.8±0.05
SQP300	22±1.5	8.0±1.0	8.0±1.0	0.8±0.05
SQP500	22±1.5	9.5±1.0	9.0±1.0	0.8±0.05
SQP700	35±1.5	9.5±1.0	9.0±1.0	0.8±0.05
SQP10A	48±1.5	9.5±1.0	9.0±1.0	0.8±0.05
SQP15A	48±1.5	12.5±1.5	12.5±1.5	1.0±0.05
SQP20A	60±2.0	12.5±1.5	12.5±1.5	1.0±0.05

Note :

ELECTRICAL CHARACTERISTICS

STYLE	SQP200	SQP300	SQP500	SQP700	SQP10A	SQP15A	SQP20A
Power Rating	2W	3W	5W	7W	10W	15W	20W
Operating Temp. Range	-55ºC to +155ºC						
Maximum Working Voltage	250V	350V	350V	500V	500V	500V	500V
Maximum Overload Voltage	500V	700V	700V	1000V	1000V	1000V	1000V
Dielectric Withstanding Voltage	500V	700V	700V	1000V	1000V	1000V	1000V
Value Range ±5% (Wirewound)	0.15Ω~100Ω	0.3Ω~120Ω	0.3Ω~180Ω	0.5Ω~220Ω	1Ω~270Ω		
Value Range ±5% (Metal Oxide Film)	110Ω~10KΩ	130Ω~22KΩ	200Ω~33KΩ	240Ω~10KΩ	300Ω~10KΩ		
Temperature Coefficient	±300ppm/ºC						

* 1. Standard resistance is as the above list, below or over this resistance on request.
* 2. Non-Inductive type up to 50Ω only.

ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD		APPRAISE
Short Time Overload	JIS-C-5202 5.5	2.5 Times RCWV for 5 Seconds	±(2%+0.05Ω)
Dielectric Withstanding Voltage	JIS-C-5202 5.7	in V-Block for 60 Seconds	by Type
Temperature Coefficient of Resistance	JIS-C-5202 5.2	-55ºC to +155ºC	±300ppm/ºC
Insulation Resistance	JIS-C-5202 5.6	in V-Block	>100MΩ
Solderability	JIS-C-5202 6.5	235ºC for 5±0.5 Seconds	95% Min. Coverage
Resistance to Solvent	JIS-C-5202 6.9	Trichroethane for 1 Min. with Ultrasonic	No Deterioration of Coatings and Markings
Terminal Strength	Direct Load for 10 Sec. in The Direction of The Terminal Leads		≥2.5kg (24.5N)
Pulse Overload	JIS-C-5202 5.8	4 Times RCWV 10000 Cycles (1 Sec. on , 25 Sec. off)	±(2%+0.05Ω)
Load Life in Humidity	JIS-C-5202 7.9	40±2ºC, 90~95% RH at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off)	±(5%+0.05Ω)
Load Life	JIS-C-5202 7.10	70ºC at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off)	±(5%+0.05Ω)
Temperature Cycling	JIS-C-5202 7.4	-55ºC→Room Temp.→+155ºC→Room Temp. for 5 Cycles	±(2%+0.05Ω)
Resistance to Soldering Heat	JIS-C-5202 6.4	350ºC±10ºC for 3±0.5 Seconds	±(1%+0.05Ω)

* Rated Continuous Working Voltage (RCWV)= $\sqrt{\text{Power Rating x Resistance Value}}$