

HSCC

POWER THICK FILM RESISTORS



HSCC:

POWER THICK FILM RESISTORS are supplied in a patented MODULAR construction that is ideal for customer specified RESISTOR MODULES as well as single resistors. These resistors are particular suitable as balancing resistors in capacitor banks in frequency drives



Næsbyvej 20. DK 2610 Rødovre . Denmark Phone +45 36 73 22 22 . Fax +45 36 73 22 23 danotherm@danotherm.dk www.danotherm.dk

Heat Sink Cooled Power Thick Film Resistor - Type HSCC, HSAC

Construction:

Specifications:

Resistor tolerance:

Working voltage:

Insulation:

TYPE:

Temperature Coefficients:

External Creeping Distance:

Air Distance Terminal./Ground

Values for standard resistors

Max voltage between terminal

Mechanical Specifications:

Test voltage for 1 min.

Temperature Limits:

Max rated wattage

Surge load in 10 sec.*(

Thermal Resistance

Nominal power

Resistance Min.

Resistance Max

HSCC L

HSCC L1

HSACI

HSAC L1

Weight HSCC

Weight HSAC

The resistor body is a thick film resistor printed on ceramic Alumina. A glass cover film protects the resistor and the terminals are soldered to the substrate with 300°C solder which makes the terminations reliable even at overload conditions.

The resistor is mounted in an Aluminum Profile. High temperature plastic insulators and metal springs make a well-defined stable thermal contact between the resistor element and the aluminum profile. Between the resistor element and the profile is a heat conducting material.

The Ceramic resistor element is completely protected from mechanical damage and the resistor can be mounted to a heat sink without further notice. The below wattage curves demands the use of a heat sink compound.

 $\pm 15\%$

± 1%, ± 0.5%

6000 VDC/ 2500 VAC

>100M2OHM/500V

HSCC 88

HSAC 70

165

80

350

2500

0.3

1.5

3

88

80

70

HSCC 104

HSAC 87

225

105

420

2500

0.22

4

104

96

87

50

55

70

HSCC 122

HSAC 104 (MODULES)

(MODULES)

(MODULES)

(MODULES)

(MODULES)

(MODULES

(MODULES)

122

114

104

75

65

90

± 250 PPM

1200 VAC

12 mm -40°C +125°C

7 mm

HSCC 71

HSAC 52

105

50

200

2000

0.47

1

2

71

63

52

Standard (NON-TRIMMING)

HSCC 54

HSAC 36

45

22

90

1000

1.12

0.3

1

54

46

36

W

W

W

V^

°K/W

Ohm

mm

mm

mm

MOhm

TRIMMED RESISTORS



HSCC 54 / HSAC 36











TYPE HSCC.

WATTAGE OF HSCC TYPES:

The curves show the wattage for each resistor at different heat sink temperatures for resistors up to about 100 KOHMS / modules. The MAX. Permanent temperature on the resistor surface is 150° C, and the MAX power or wattage is 400 mW/mm^2

The MAX WATTAGE is the maximum constant power at which the resistor can be operated.

The NOMINAL POWER is the power at which the resistor withstand 4 times overload in 10 seconds.

Resistors can be supplied non-trimmed with resistor tolerance $\pm 15\%$. If a more narrow tolerance is requested the resistor have to be trimmed. In this case the wattage has to be reduced to 70% as shown on the curves