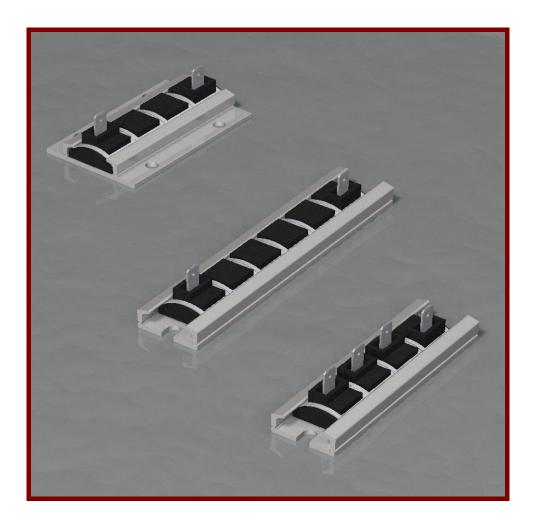
HEAT SINK COOLED

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



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

Construction:

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.

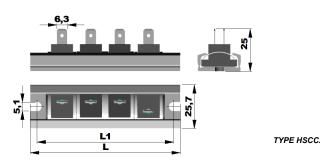
The resistor is mounted in an Aluminum Profile. High temperature plastic insulators and metal springs make a well-defined stable thermal contact between the resistor element and the aluminum profile. Between the resistor element and the profile is a heat conducting material.

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.

Specifications:

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Resistor tolerance:	Standard (NON-TRIMMING)	± 15%		
	TRIMMED RESISTORS	± 1%, ± 0.5%		
Temperature Coefficients:		± 250 PPM		
Test voltage for 1 min.:		6000 VDC/ 2500 VAC		
Working voltage:		1200 VAC		
External Creeping Distance:		12 mm		
Temperature Limits:		-40°C +125°C		
Insulation:		>100M ² OHM/500V		
Air Distance Terminal./Ground	d	7 mm		

TYPE: Values for standard resistors		HSCC 54 HSAC 36	HSCC 71 HSAC 52	HSCC 88 HSAC 70	HSCC 104 HSAC 87	HSCC 122 HSAC 104		
Max rated wattage	W	45	105	165	225	(MODULES)		
Nominal power	W	22	50	80	105	(MODULES)		
Surge load in 10 sec.*(W	90	200	350	420	(MODULES)		
Max voltage between terminal	٧^	1000	2000	2500	2500	(MODULES)		
Thermal Resistance	°K/W	1.12	0.47	0.3	0.22	(MODULES)		
Resistance Min.	Ohm	0.3	1	1.5	2	(MODULES)		
Resistance Max.	MOhm	1	2	3	4	(MODULES)		
Mechanical Specifications:								
HSCC L	mm	54	71	88	104	122		
HSCC L1	mm	46	63	80	96	114		
HSAC L	mm	36	52	70	87	104		
HSAC L1	mm	-	-	40	50	75		
Weight HSCC	g	26	33	44	55	65		
Weight HSAC	g	35	45	56	70	90		



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/mm²

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



