

Ceramic Heat Spreader Circular Pin Fin Series

SPREADFAST[®]

CERAMIC HEAT SPREADERS

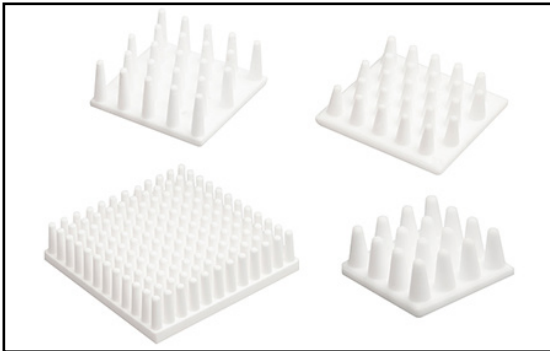
www.heatspreaders.com

Features:

Lower density (when compared with metal heat sink varieties)
High breakdown voltage
Good heat spreader
High volume resistivity
Good EMC
Ideal for direct metalisation
Good thermal cycling stability

Applications:

Metal heat sink replacement,
LED, Chipset cooling, power modules, IC cooling



Part Number	Size - Circular Pin Fin Spreader	R _{th} (°C/W) at 100 lfm	R _{th} (°C/W) at 400 lfm	Dwg
SF-CHS-131306-PC	13x13x6mm	58.9	33.4	A
SF-CHS-151506-PC	15x15x6mm	52.5	29.5	B
SF-CHS-171706-PC	17x17x6mm	43.3	23.2	C
SF-CHS-191906-PC	19x19x6mm	38.7	20.3	D
SF-CHS-212110-PC	21x21x10mm	21.3	9.8	E
SF-CHS-232310-PC	23x23x10mm	24.0	12.7	F
SF-CHS-272710-PC	27x27x10mm	15.6	7.2	G
SF-CHS-313110-PC	31x31x10mm	14.6	7.2	H
SF-CHS-353510-PC	35x35x10mm	15.4	7.7	I
SF-CHS-424212-PC	42x42x12mm	9.4	5.1	J
SF-CHS-454512-PC	45x45x12mm	9.9	5.3	K
SF-CHS-505012-PC	50x50x12mm	7.2	3.7	L
SF-CHS-606015-PC	60x60x15mm	4.7	2.6	M

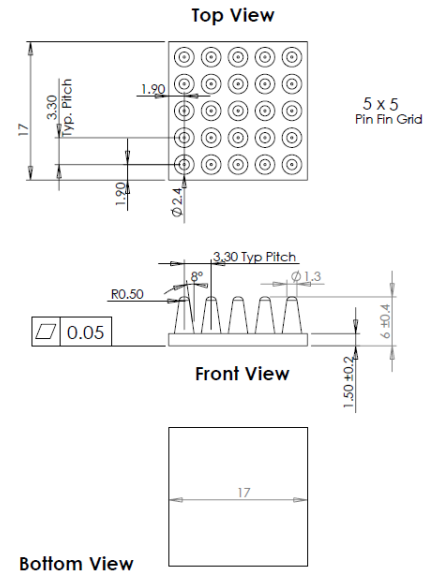
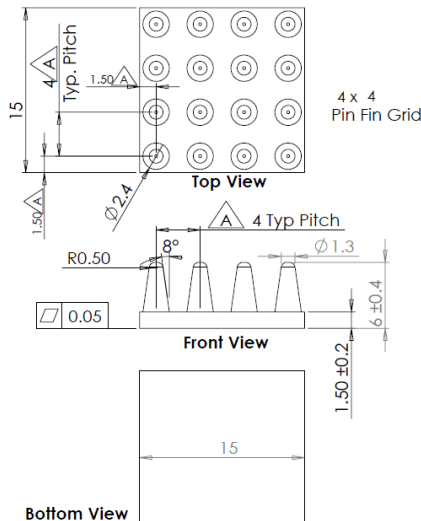
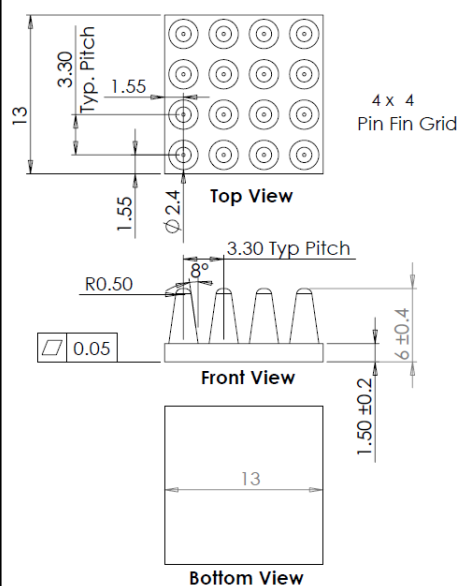
Property	Units	Value
Physical		
Material	N/A	Al ₂ O ₃
Density	g/cm ³	3.66
Water absorption	%	0.002
Acid/ alkali resistance	mg/cm ³	≤ 0.2
Mechanical		
Mohs hardness	HV	9
Bend Strength	MPa	≥610
Compression Intensity	MPa	≥620
Thermal		
Max. working temperature	°C	1400
Thermal expansion coefficient	(1x10 ⁻⁶) mm/ °C	7.8 - 8.3
Thermal Conductivity	W/m K	25
Electrical		
Resisting rate of volume	Ω °C	1016
DC breakdown strength	kV/mm	15.2 - 16.7
Dielectric constant	(E)	18
Dielectric dissipation	(tg o)	0.4 x 10 ⁻³

Drawing layouts:

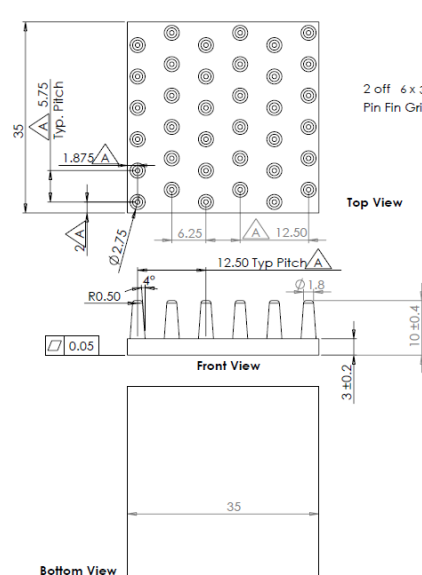
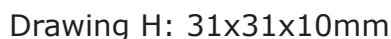
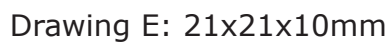
Drawing A: 13x13x6mm

Drawing B: 15x15x6mm

Drawing C: 17x17x6mm



Drawing D: 19x19x6mm



Drawing J: 42x42x12mm

