



# Smart Heatsinks

Unlike Any Others

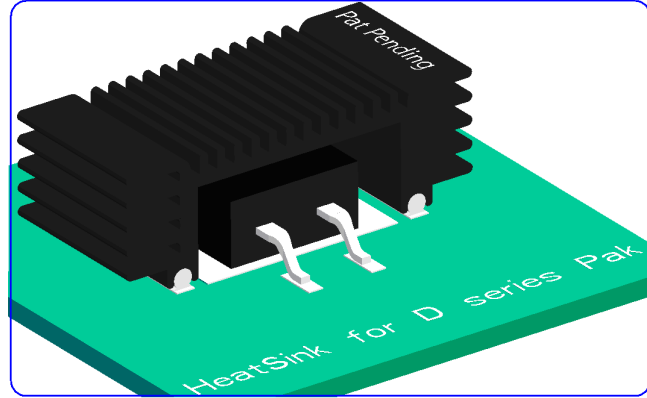
## SHS SURFACE MOUNT HEAT SINK for D, D2 & D3 Pak



### SMART HEATSINKS SURFACE MOUNT HEAT SINK

Smart Heatsinks® introduces an innovation in SMT compatible heat sinks to meet the needs of newer higher power SMT semiconductors. The heat sinks' unique design (Patent Pending) combines the technology of automatically assembling the tin plated solderable wires/rods with that of extruded aluminum anodized or painted heat sink body to configure these SMT heat sinks.

Rods/wires named "Rollers" are mated mechanically to the heat sink body by forging to reduce the interface thermal resistance between the drains & heat dissipation body.



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#### FEATURES AND BENEFITS:

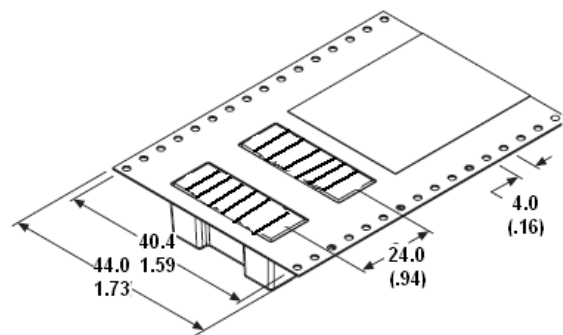
- Increased thermal performance up to 30% over bright copper heat sinks from improved radiation of the black finish
- Increased surface areas by 3 times therefore thermal performance up to 300% over the aluminum stamped heat sinks on markets
- Unique aluminum extrusion design reduces the heat sink cost versus similar designs utilizing copper
- Light weight aluminum construction allows faster pick and place assembly reducing the manufacturing cycle time
- Radius mounted "Rollers" are designed for maximizing heat transfer from component and to avoid "bottle neck" heat transfer like the Aluminum stamped from Aavid.
- Available in bulk packaging or Tape & Reel

#### APPLICATIONS:

- Power Suppliers
- Telecommunications
- Motor controls
- Medical Equipment
- Avionic Electronic
- Military Electronic
- Consumer Products
- Solar Energy Products

#### TAPE AND REEL:

- Tape width: 44.00 (1.73)
- Pocket depth: 13.50 (0.53)
- Pocket pitch: 20.00 (0.79)
- Reel diameter: 330.00 (13.00)
- Tape holes diameter: 1.50 (0.06)
- Distance between tape holes centers (along width): 40.40 (1.59)
- Pitch between tape holes centers (along length): 4.00 (0.16)



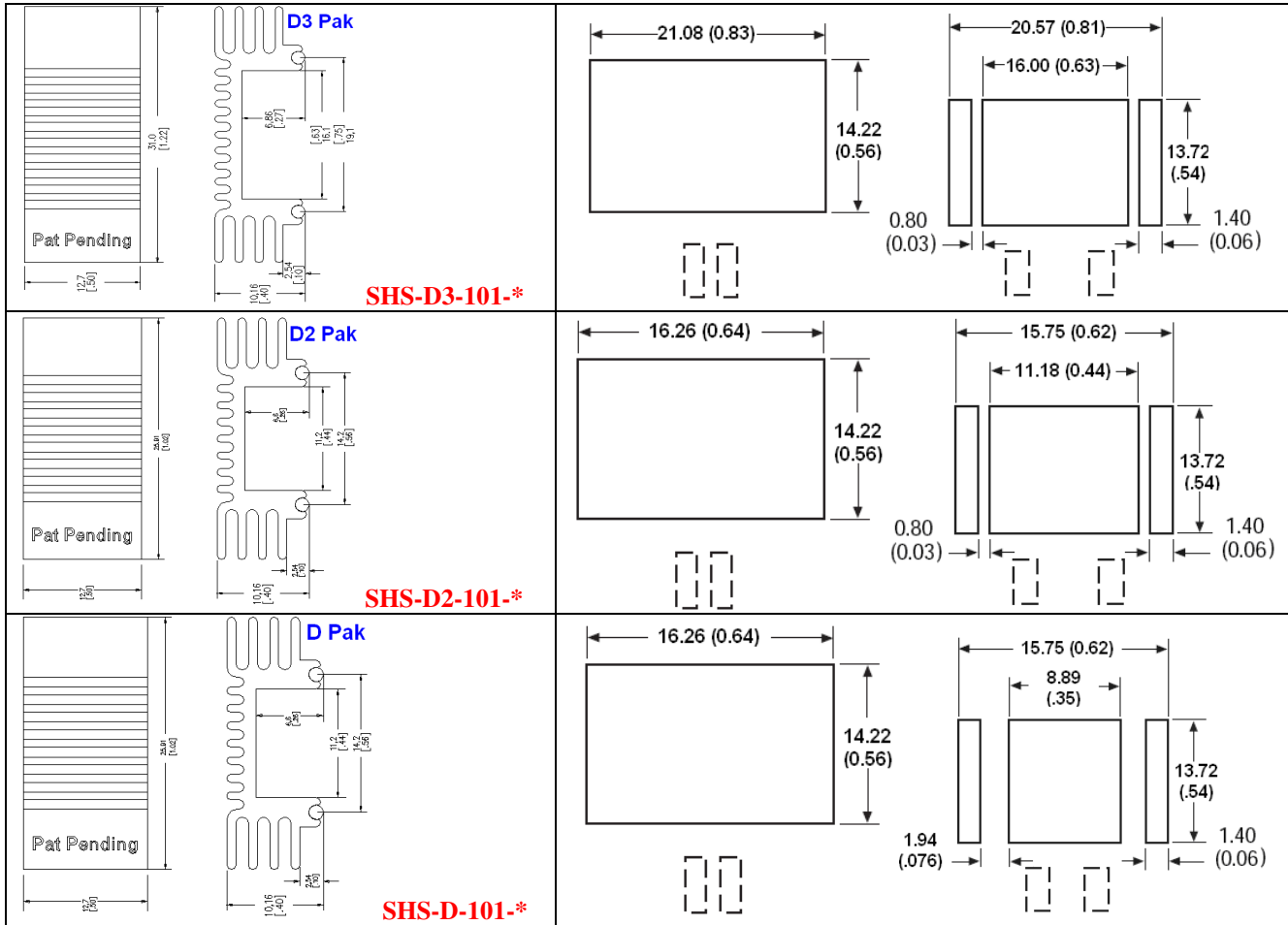
#### MECHANICAL OUTLINE:

##### FOOTPRINTS

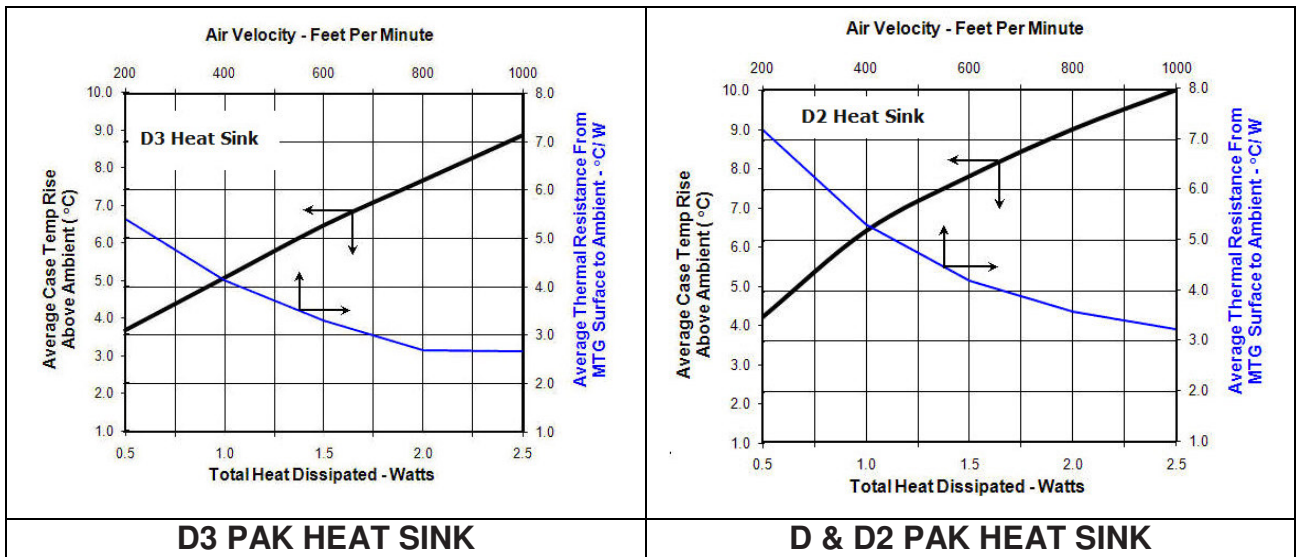


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**PERFORMANCE:**



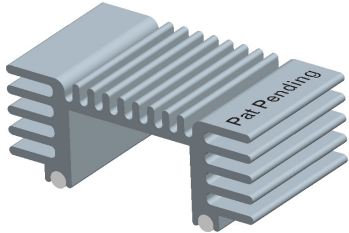

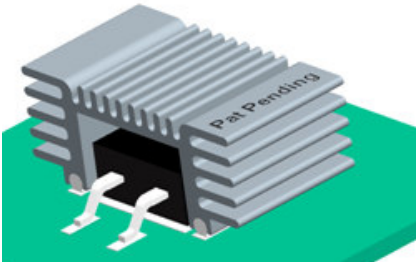

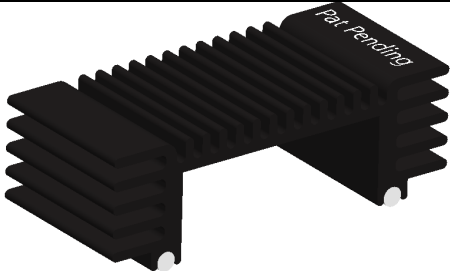
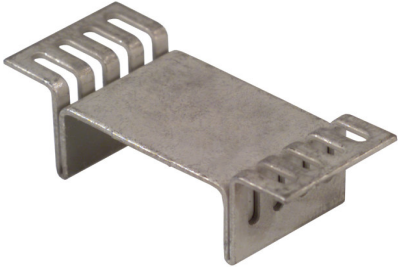


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SINK for D, D2 & D3 Pak



Heat Sink Comparisons

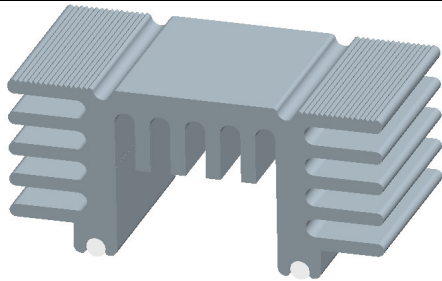
Smart Heatsinks	Comparison	Aavid, Wakefield & others
 <b>D Pak (TO-252) Heat Sink</b>	Vs.	 <b>D Pak (TO-252) Heat Sink</b>
Surface Areas	<b>5 times</b>	Surface Areas
Thermal Performance	<b>Up to 500%</b>	Thermal Performance
Radiation Improvement	<b>Up to 130%</b>	Radiation Improvement
Cost/Watt	<	Cost /Watt
Footprint	>	Footprint
Height	=	Height
 <b>D2 Pak (TO-263) Heat Sink</b>	vs	 <b>D2 Pak (TO-263) Heat Sink</b>
Surface Areas	<b>3 times</b>	Surface Areas
Thermal Performance	<b>Up to 300%</b>	Thermal Performance
Cost/ Watt	<	Cost/ Watt
Footprint	=	Footprint
Height	=	Height
 <b>D3 Pak (TO-268) Heat Sink</b>	Vs.	 <b>D3 Pak (TO-268) Heat Sink</b>
Surface Areas	<b>3 times</b>	Surface Areas
Radiation Improvement	<b>Up to 130%</b>	Radiation Improvement
Thermal Performance	<b>Up to 350%</b>	Thermal Performance
Cost/ Watt	<	Cost/ Watt
Footprint	=	Footprint
Height	=	Height



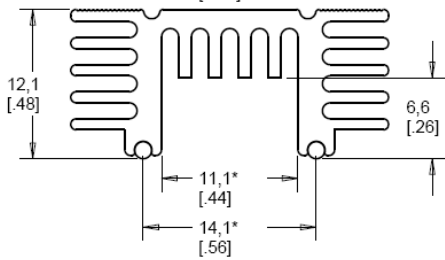
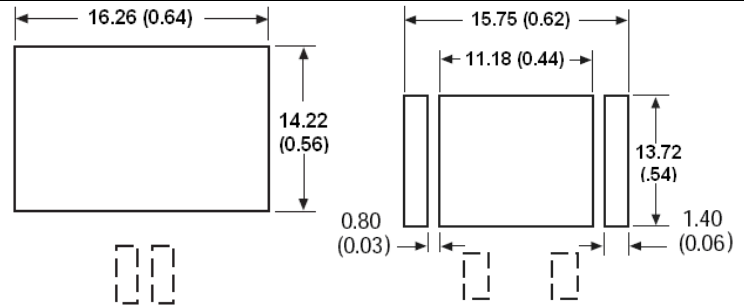
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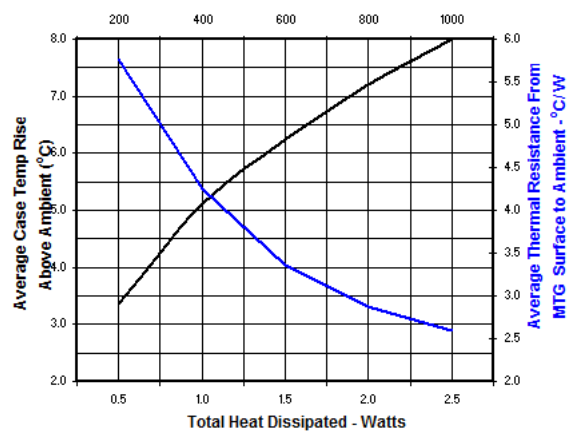
## SHS SURFACE MOUNT HEAT SINK for D, D2 & D3 Pak



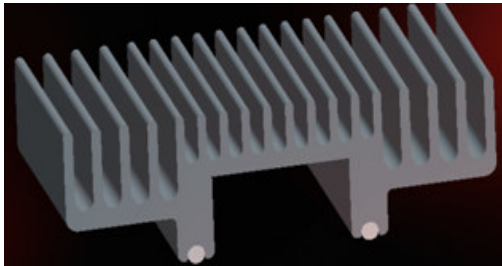
**P/N: SHS-D2-103-\***



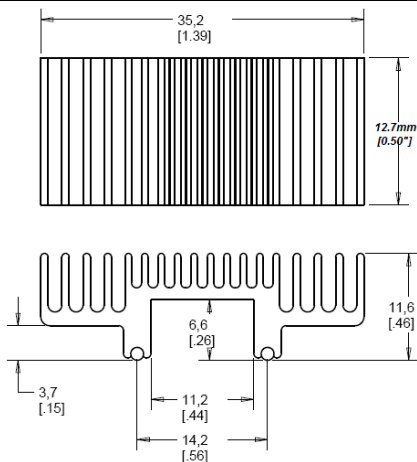
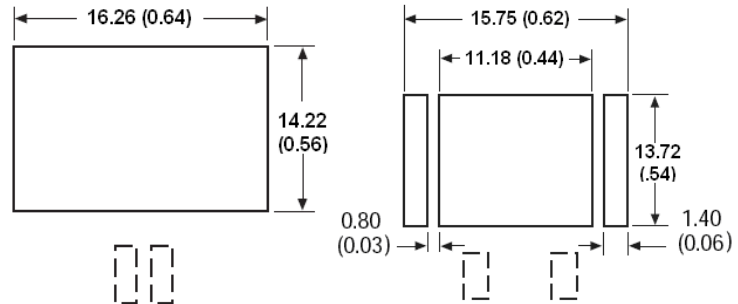
**Thermal Performance for D2 Heatsink**  
Air Velocity - Feet Per Minute



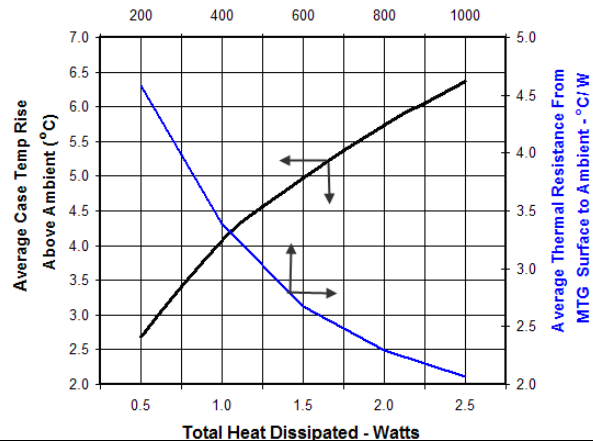
### The 2<sup>nd</sup> generation "Cactus Heat Sink" for D2 Pack



**P/N: SHS-D2-213-\***



**Air Velocity - Feet Per Minute**

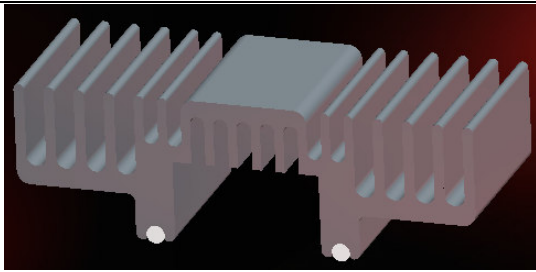




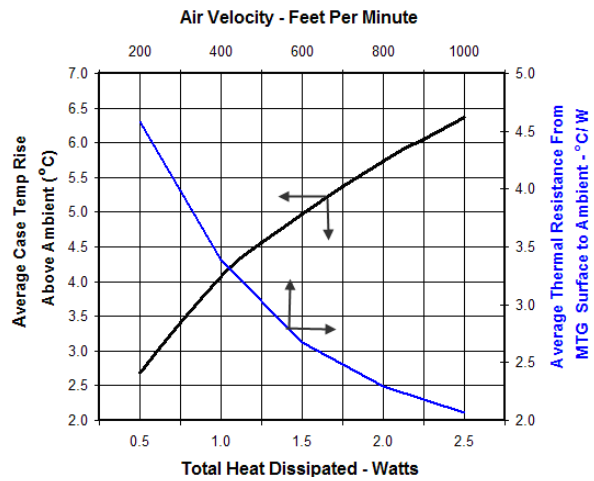
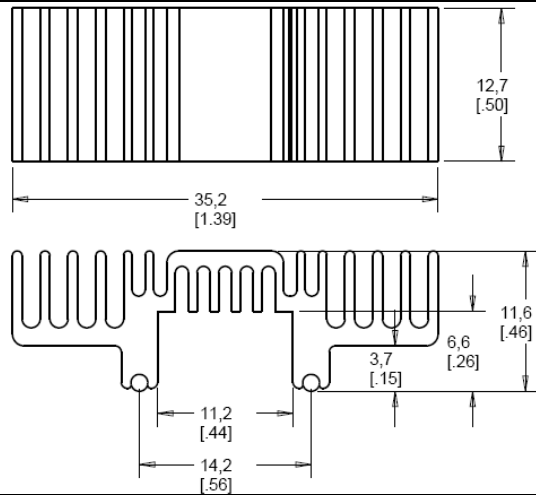
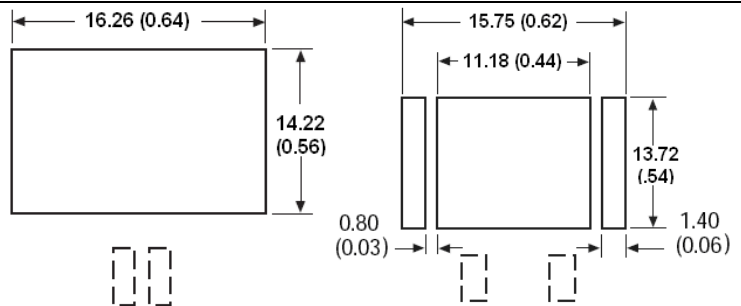
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## SHS SURFACE MOUNT HEAT SINK for D, D2 & D3 Pak



**P/N: SHS-D2-313-\***





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SHS SURFACE MOUNT HEAT  
SINK for D, D2 & D3 Pak



### ORDERING INFORMATION

Part Number	Descriptions	Packaging
SHS-D2-101-D	Heat sink for D or D2 PAK, degreased finish	Bulk
SHS-D2-101-B	Heat sink for D or D2 PAK, black finish	Bulk
SHS-D2-101-D-TR	Heat sink for D or D2 PAK, degreased finish	13" reel 250/reel
SHS-D2-101-B-TR	Heat sink for D or D2 PAK, black finish	13" reel 250/reel
SHS-D2-103-BD	Heat sink for D or D2 PAK, black with silver ends	Bulk
SHS-D2-103-BD-TR	Heat sink for D or D2 PAK, black with silver ends	13" reel 250/reel
SHS-D2-213-D	Heat sink for D or D2 PAK, degreased finish	Bulk
SHS-D2-213-B	Heat sink for D or D2 PAK, black finish	Bulk
SHS-D2-213-D-TR	Heat sink for D or D2 PAK, degreased finish	13" reel 250/reel
SHS-D2-213-B-TR	Heat sink for D or D2 PAK, black finish	13" reel 250/reel
SHS-D2-313-D	Heat sink for D or D2 PAK, degreased finish	Bulk
SHS-D2-313-B	Heat sink for D or D2 PAK, black finish	Bulk
SHS-D2-313-D-TR	Heat sink for D or D2 PAK, degreased finish	13" reel 250/reel
SHS-D2-313-B-TR	Heat sink for D or D2 PAK, black finish	13" reel 250/reel
SHS-D3-101-D	Heat sink for D3 PAK, degreased finish	Bulk
SHS-D3-101-B	Heat sink for D3 PAK, black finish	Bulk
SHS-D3-101-D-TR	Heat sink for D3 PAK, degreased finish	13" reel 250/reel
SHS-D3-101-B-TR	Heat sink for D3 PAK, degreased finish	13" reel 250/reel

NOTE: Some of the surface mount heat sinks are 100% exchangeable with those on market.