Technical Summary and Application Guidelines

Guidlines for Surface Mount Footprints

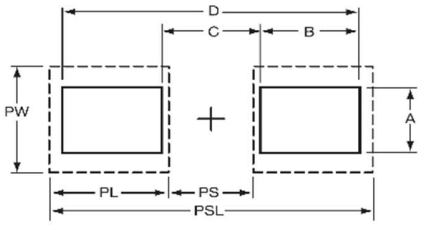
MECHANICAL PROPERTIES OF CAPACITORS

The component footprint is defined as the maximum board area taken up by the terminators.

The footprint dimensions are given by A, B, C and D in the diagram, which corresponds to W max., Lt min., S min. and L max. for the component (Please see datasheet). The footprint is symmetric about the center lines.

For reflow soldering, dimensions PL (Pad Length), PW (Pad Width), and PSL (Pad Set Length) have been calculated. For wave soldering the pad width (PWw) is reduced to less than the termination width to minimize the amount of solder pick up while ensuring that a good joint can be produced.

Nominal footprint and pad dimensions for each case size are given in the following tables:



PAD DIMENSIONS:

millimeters (inches)

Case Size		PSL	PL	PS	PW	PW_w
Series	A	4.40 (0.173)	1.60 (0.063)	1.20 (0.047)	1.80 (0.071)	0.90 (0.035)
TACmicrochip® Series	B	4.70 (0.185)	1.70 (0.067)	1.30 (0.051)	3.00 (0.118)	1.50 (0.059)
	D	4.40 (0.173)	1.60 (0.063)	1.20 (0.047)	1.80 (0.071)	0.90 (0.035)
	H	3.20 (0.126)	1.30 (0.051)	0.60 (0.024)	1.50 (0.059)	0.075 (0.003)
	I	4.40 (0.173)	1.60 (0.063)	1.20 (0.047)	1.80 (0.071)	0.90 (0.035)
	J	2.80 (0.110)	1.10 (0.043)	0.60 (0.024)	1.00 (0.039)	0.50 (0.019)
	K	2.20 (0.087)	0.90 (0.035)	0.40 (0.016)	0.70 (0.028)	0.35 (0.014)
	L	2.80 (0.110)	1.10 (0.043)	0.60 (0.024)	1.00 (0.039)	0.50 (0.019)
	M	3.20 (0.126)	1.30 (0.051)	0.60 (0.024)	1.00 (0.039)	0.50 (0.019)
	R	3.20 (0.126)	1.30 (0.051)	0.60 (0.024)	1.50 (0.059)	0.075 (0.003)
	T	4.70 (0.185)	1.70 (0.067)	1.30 (0.051)	3.00 (0.118)	1.50 (0.059)
	U	3.20 (0.126)	1.30 (0.051)	0.60 (0.024)	1.50 (0.059)	0.075 (0.003)
	V	4.40 (0.173)	1.60 (0.063)	1.20 (0.047)	1.80 (0.071)	0.90 (0.035)
	Z	2.80 (0.110)	1.10 (0.043)	0.60 (0.024)	0.70 (0.028)	0.35 (0.014)

These recommendations (also in compliance with EIA) are guidelines only. With care and control, smaller footprints may be considered for reflow soldering.