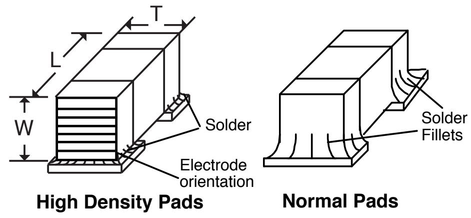
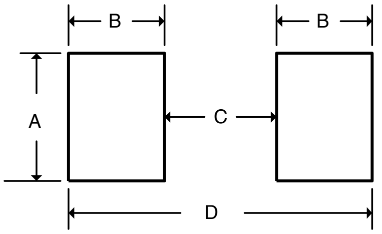
SUGGESTED MOUNTING PAD DIMENSIONS FOR ATC MULTILAYER CHIP CAPACITORS

HORIZONTAL (FLAT) MOUNT – REFLOW SOLDERING



High Density Pads **Normal Pads**

W = Chip Width L = Chip Length T = Chip Thickness



CHIP SIZE	MOUNTING MODE	A MIN.	B MIN.	C MIN.	D MIN.
A Case	Normal	.080	.050	.030	.130
	High Density	.060	.030	.030	.090
B Case	Normal	.130	.050	.075	.175
	High Density	.110	.030	.075	.135
C Case	Normal	.280	.050	.200	.300
	High Density	.260	.030	.200	.260
E Case	Normal	.405	.050	.325	.425
	High Density	.385	.030	.325	.385
R Case	Normal	.110	.050	.030	.130
(Vertical Electrodes)	High Density	.090	.030	.030	.090

All dimensions in inches

NOTES:

NORMAL mounting will allow the solder fillet to travel up approximately 0.015" of the chip's end and side termination surfaces. Heavier fillets require a predeposition of solder paste and or an increase in pad dimensions. Typical solder paste application is a .008" to 0.01" thickness with > 50% of volume in solder alloy.

HIGH DENSITY mounting will allow for chip attachment by the bottom side termination surface with a minimum exposed fillet on the remaining side and end termination surfaces. Typical solder paste application is the same as that for normal mounting. Recommended proximity of chips should be no closer than .050". Be sure components are placed so that they are repairable and accessible.

The soldering defect known as DRAWBRIDGING or TOMBSTONING may be reduced by shrinking the normal B pad dimension toward that shown for HIGH DENSITY pads.

ATC # 001-820 Rev. D 9/08

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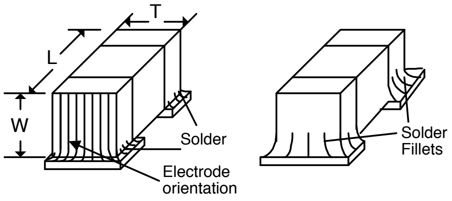
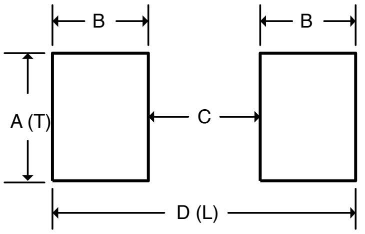
SUGGESTED MOUNTING PAD DIMENSIONS FOR ATC MULTILAYER CHIP CAPACITORS

VERTICAL MOUNT – REFLOW SOLDERING



High Density Pads **Normal Pads**

W = Chip Width L = Chip Length T = Chip Thickness



CHIP SIZE	MOUNTING MODE	A MIN.	B MIN.	C MIN.	D MIN.
A Case	Normal High Density	.070 .050	.050 .030	.030 .030	.130 .090
B Case 0.1 pF	Normal High Density	.065 .045	.050 .030	.075 .075	.175 .135
B Case 0.2 pF	Normal High Density	.090 .070	.050 .030	.075 .075	.175 .135
B Case 0.3 to 510 pF	Normal High Density	.110 .090	.050 .030	.075 .075	.175 .135
B Case > 510 pF	Normal High Density	.120 .100	.050 .030	.075 .075	.175 .135
C Case, 100/700 Series values < 680 pF	Normal High Density	.150 .130	.050 .030	.200 .200	.300 .260
C Case, 100/700 Series values > 680 pF	Normal High Density	.185 .165	.050 .030	.200 .200	.300 .260
C Case, 900 Series values < .82 uF	Normal High Density	.150 .130	.050 .030	.200 .200	.300 .260
C Case, 900 Series values > .82 uF	Normal High Density	.185 .165	.050 .030	.200 .200	.300 .260
E Case	Normal High Density	.185 .165	.050 .030	.325 .325	.425 .385
R Case (Horizontal Electrodes)	Normal High Density	.095 .075	.050 .030	.030 .030	.130 .090

All dimensions in inches

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