

8.3.2.1 Rectangular or Square End Chip Components – 1, 2, 3 or 5 Side Termination(s) – Side Overhang (A)

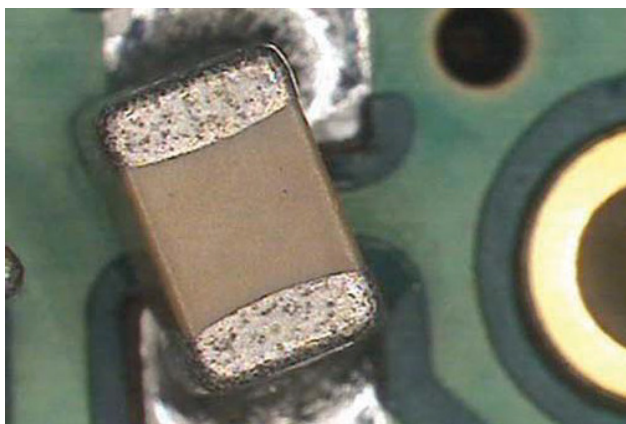


Figure 8-16

Acceptable – Class 1,2

- Side overhang (A) is less than or equal to 50% width of component termination area (W) or 50% width of land (P), whichever is less.

Acceptable – Class 3

- Side overhang (A) is less than or equal to 25% width of component termination area (W) or 25% width of land (P), whichever is less.

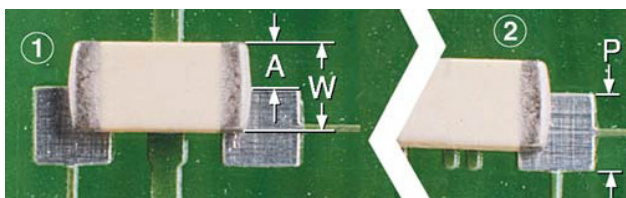


Figure 8-17

- Class 1,2
- Class 3

8.3.2.1 Rectangular or Square End Chip Components – 1, 2, 3 or 5 Side Termination(s) – Side Overhang (A) (cont.)

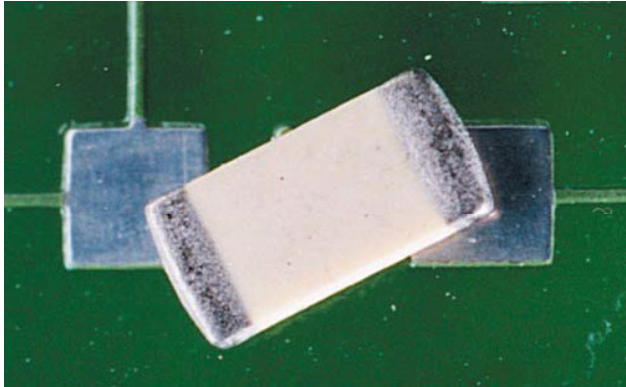


Figure 8-18

Defect – Class 1,2

- Side overhang (A) is greater than 50% component termination width (W) or 50% land width (P), whichever is less.

Defect – Class 3

- Side overhang (A) is greater than 25% component termination width (W) or 25% land width (P), whichever is less.

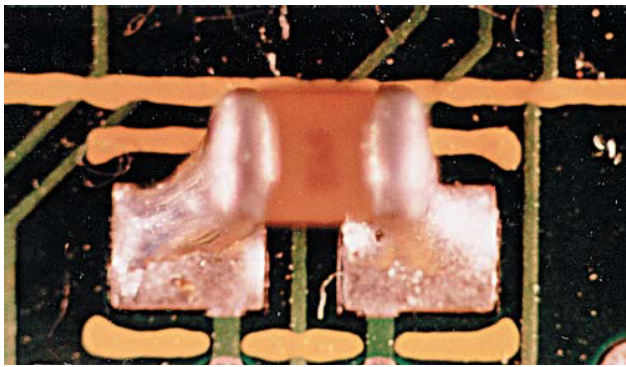


Figure 8-19

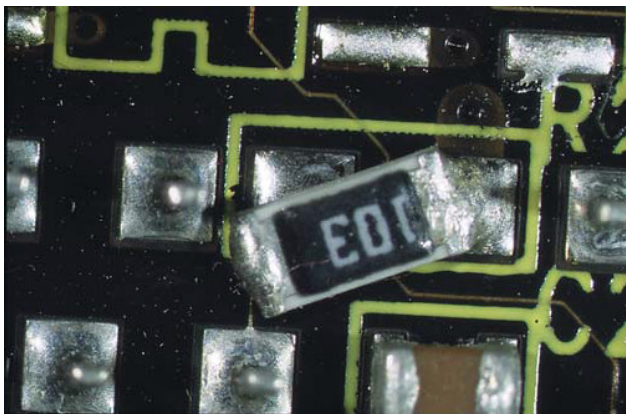


Figure 8-20

**8.3.2.2 Rectangular or Square End Chip Components –
1, 2, 3 or 5 Side Termination(s) – End Overhang (B)**

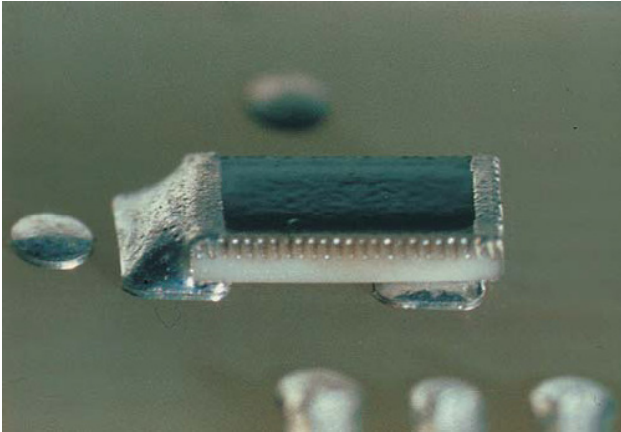


Figure 8-21

Defect – Class 1,2,3

- Termination overhangs land.

8.3.2.3 Rectangular or Square End Chip Components – 1, 2, 3 or 5 Side Termination(s) – End Joint Width (C) (cont.)

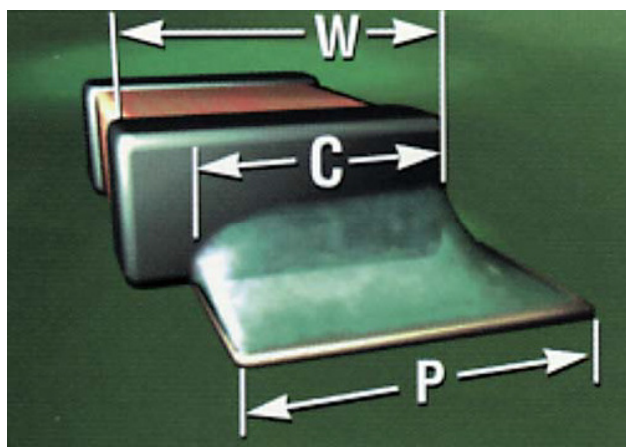


Figure 8-24

Acceptable – Class 3

- End joint width (C) is minimum 75% of component termination (W) or 75% land width (P), whichever is less.

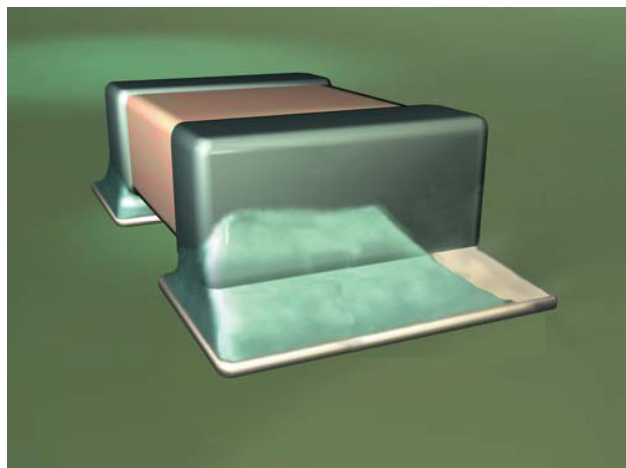


Figure 8-25

Defect – Class 1,2,3

- Less than minimum acceptable end joint width.

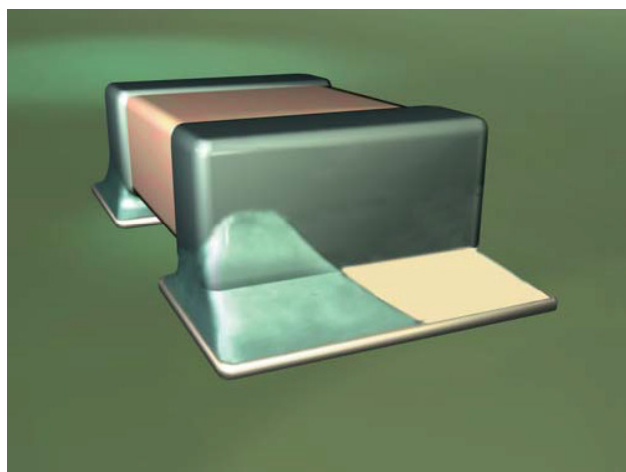


Figure 8-26

8.3.2.4 Rectangular or Square End Chip Components – 1, 2, 3 or 5 Side Termination(s) – Side Joint Length (D)

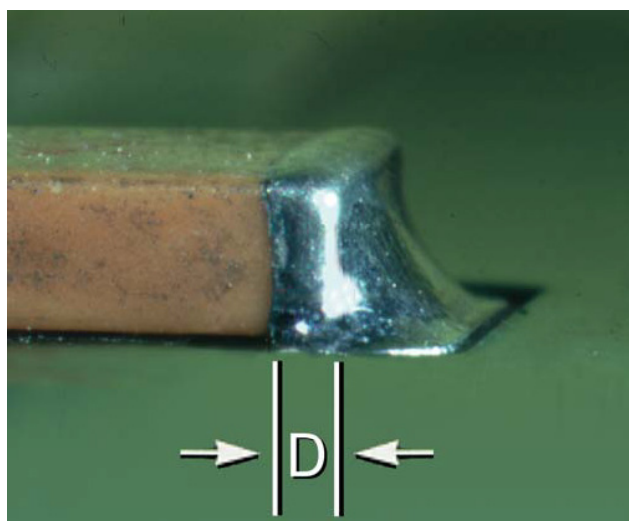


Figure 8-27

Acceptable – Class 1,2,3

- Side joint length is not required. However, a wetted fillet is evident.

Defect – Class 1,2,3

- No wetted fillet.

8.3.2.5 Rectangular or Square End Chip Components – 1, 2, 3 or 5 Side Termination(s) – Maximum Fillet Height (E)

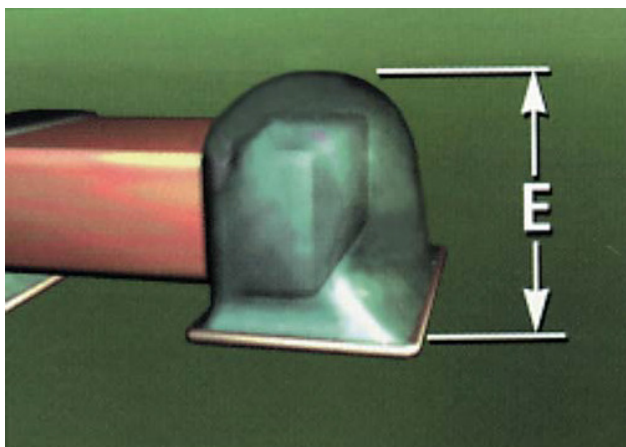


Figure 8-28

Acceptable – Class 1,2,3

- Maximum fillet height (E) may overhang the land and/or extend onto the top or side metallization, but does not touch the top or side of the component.

Defect – Class 1,2,3

- Solder fillet extends onto the top of the component body.

8.3.2.6 Rectangular or Square End Chip Components – 1, 2, 3 or 5 Side Termination(s) – Minimum Fillet Height (F)



Figure 8-29

Acceptable – Class 1,2

- Minimum fillet height (F) exhibits wetting on the vertical surface(s) of the component termination.

Acceptable – Class 3

- Minimum fillet height (F) is solder thickness (G) plus either 25% termination height (H), or 0.5 mm [0.02 in], whichever is less.

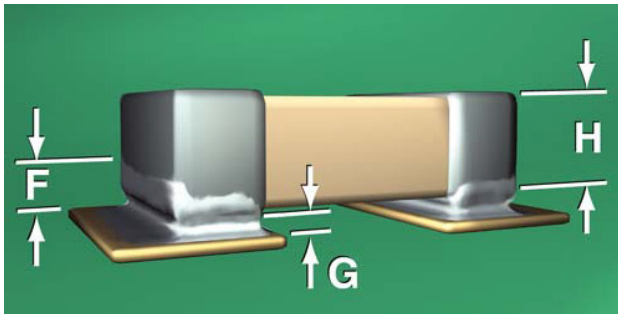


Figure 8-30

Defect – Class 1,2

- No fillet height evident on face of component.

Defect – Class 3

- Minimum fillet height (F) is less than solder thickness (G) plus either 25% (H), or solder thickness (G) plus 0.5 mm [0.02 in], whichever is less.

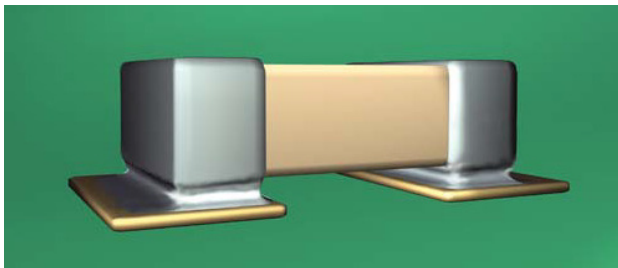


Figure 8-31

Defect – Class 1,2,3

- Insufficient solder.
- A wetted fillet is not evident.

**8.3.2.7 Rectangular or Square End Chip Components –
1, 2, 3 or 5 Side Termination(s) – Solder Thickness (G)**

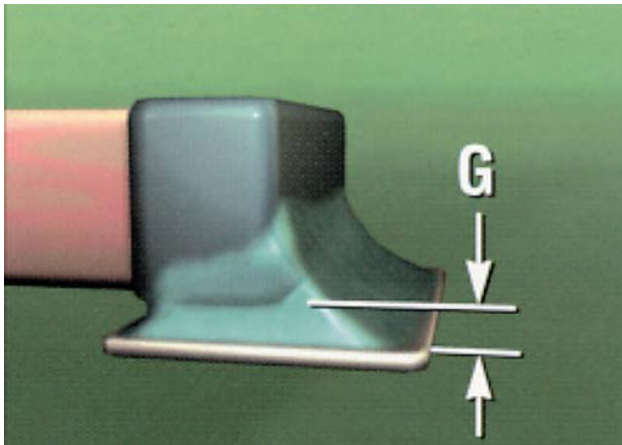


Figure 8-32

Acceptable – Class 1,2,3

- Wetted fillet evident.

Defect – Class 1,2,3

- No wetted fillet.

8.3.2.8 Rectangular or Square End Chip Components – 1, 2, 3 or 5 Side Termination(s) – End Overlap (J)

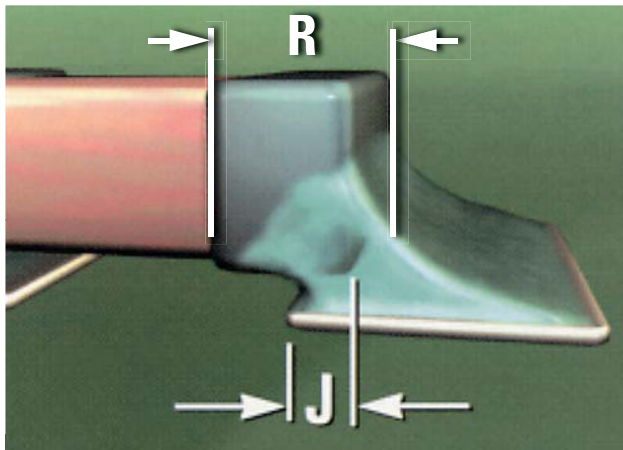


Figure 8-33

Acceptable – Class 1,2

- Evidence of overlap contact (J) between the component termination and the land is required.

Acceptable – Class 3

- End overlap (J) is 25% or more of component termination length (R).

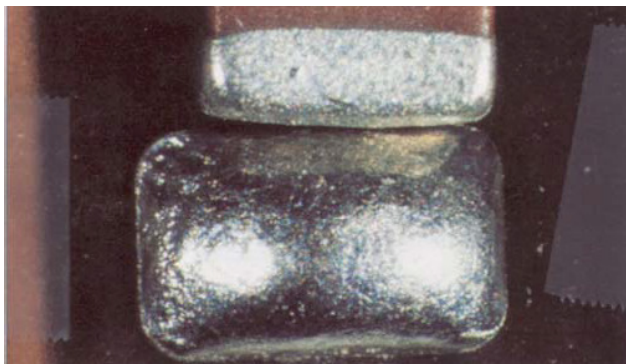


Figure 8-34

Defect – Class 1,2,3

- Insufficient end overlap.

Defect – Class 3

- End overlap (J) is less than 25% of component termination length (R).

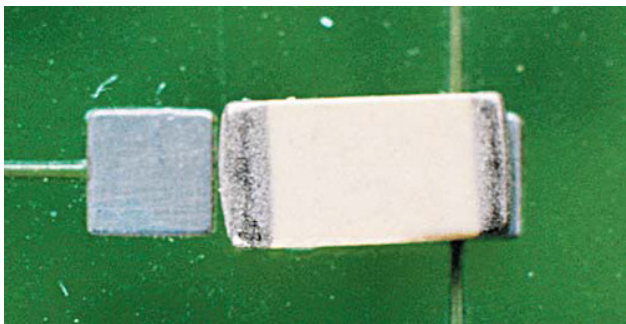


Figure 8-35