What is claimed is:

1. A method of exposing electrical contact members of an electrical device having an active device region and a barrier layer formed by atomic layer deposition (ALD), the method comprising:

depositing solder elements on the electrical contact members;

forming the barrier layer using ALD, wherein the barrier layer covers the active device region and also covers the solder elements that respectively cover the electrical contact members; and

removing respective portions of the barrier layer covering the solder elements after melting the solder elements.

2. The method according to claim 1, wherein the barrier layer includes at least one of Al_2O_3, SiO_2, TiO_2 and ZrO_2.

3. The method according to claim 1, wherein the solder elements are formed using solder-bump technology.

4. The method according to claim 1, wherein the electrical contact members are located around at least a portion of a perimeter of the active device region.

5. The method according to claim 1, wherein melting the solder elements includes applying heat to the solder elements through the barrier layer.

6. The method according to claim 5, wherein the heat is provided by a laser.

7. The method according to claim 1, further comprising removing the solder elements from the electrical contact members to expose the electrical contact members.

8. The method according to claim 1, wherein at least portions of each of the solder elements remain on the respective electrical contact members.

9. The method according to claim 1, wherein the active region includes at least one of: a light-emitter, a light sensor, a MEMS device, an electrolytic capacitor and a DMD device.

10. The method according to claim 1, further comprising establishing electrical contact with one or more of the electrical contact members.

11. The method according to claim 1, wherein the electrical contact members include electrical contact pads or electrical contact pins.

12. A method of providing at least one electrical contact for an electrode-based electrical device, comprising:

a) depositing a first metal layer on a support substrate using an atomic layer deposition (ALD) process, wherein the first metal layer defines a first electrode;

b) depositing at least one first solder element on the first metal layer;

c) forming an insulating layer over the first metal layer and the at least one first solder element;

d) forming at least one exposed portion of the first metal layer after melting the first solder element and removing a corresponding portion of the insulating layer;

e) depositing at least one second solder element on the at least one exposed portion of the first metal layer;

f) adding a second metal layer over the insulating layer and the at least one second solder element to define a second electrode; and

g) defining at least one electrical contact for the first electrode after melting the at least one second solder element and exposing at the least one exposed portion of the first metal layer.

13. The method according to claim 12, wherein the electrode-based electrical device is a capacitor.

14. The method according to claim 12, wherein forming the insulating layer includes depositing an insulating material using an ALD process.

15. The method according to claim 14, wherein the insulating material is Al_2O_3.

16. The method according to claim 12, wherein the support substrate comprises a micro-capillary plate made of an insulating material.

17. The method according to claim 14, wherein at least one of the first and second metal layers is made of platinum.

18. The method according to claim 12, wherein the support substrate includes high-aspect-ratio features.

19. The method according to claim 12, wherein the electrode-based electrical device is a metal-oxide-metal capacitor.

20. The method according to claim 12, wherein the at least one first and second solder elements includes respective pluralities of the first and second solder elements.

21. The method according to claim 12, wherein act e) includes the at least one second solder element covering a portion of the insulating layer immediately adjacent the at least one exposed portion of the first metal layer, and wherein act g) exposes the portion of the insulating layer that was covered in act e).