Stupid Oven

I've been steaming about this most of the evening. For supper I put in a Lasagna for dinner, set the timer, the temperature and walked away. An hour into the cooking time I smelt something burning. I checked the stove and there was a blinking light. I opened the oven, and it was much warmer than the 400 I set it at, and the broiler was on too. I couldn't turn the thing off either!!!!! Dinner almost ruined (very brown on top) and a stove that would not turn off! I had to turn off power at the breaker box to make sure it was off.

Now it is an older stove (10-15 years?), so you can expect a thing or two to go wrong after the use it got. But really, a failure of some part causing both elements of the stove to turn on and continue heating? Shouldn't it fail to the off position (no heat)? I found out the cause of the problem, and the part is around \$100 dollars. I should be able to put it in myself. My concern with this is that the thing will fail again in the ON position. At that much money (1/3 to 1/5 the cost of new), I may want to research new stoves, and find one that fails on the off side. I find this a little dangerous, especially now that I'm getting older. Fixing this problem will give me another 10-15 years, and by then I may have some concentration problems. Bad enough I won't remember I put the tea-kettle on, but the stove being on when it looks off bothers me.