



WJ Communications provides surface-mount devices that are capable of withstanding the maximum temperature reflow profile shown in Figure 1. This includes a preheat and cool-down rate of 3 and 6 °C/sec, respectively, with a maximum reflow temperature of 260°C for a maximum of 40 seconds. This profile is consistent with the recommendations of the IPC/JEDEC J-STD-020B: "Moisture/Reflow Sensitivity Classification for Nonhermetic Solid State Surface Mount Devices" (page 5).

Reliability of the solder joint attach of surface-mount parts to the circuit-card assemblies is directly related to the land pattern that is used. WJ Communications recommends the use of the land patterns shown on the particular product data sheets to ensure that a proper amount of solder is available at every joint. The amount and location of solder at the lands is directly related to the reliability of the solder joints.

PLANAR SURFACE-MOUNT DEVICES

WJ Communications has performed extensive solder joint reliability testing of our planar-mounted devices. WJ Communications highly recommends the use of the land patterns shown on the particular product data sheets and that at least 0.006 inches (0.15 mm) of solderpaste be applied to the board; this corresponds to 0.003 inches (0.08 mm) of final solder height on the assembly.

