

Table 3. Sample Size and Preconditioning				
Components/ Lot (min.)	Lots	Precondition ¹	Test Condition	Total Components (min.)
3	3	None (4 weeks @ambient)	Ambient temp/ humidity	9
3	3	None (4 weeks @ambient)	High temp/ humidity	9
3	3	Reflow simulation @215°C	Ambient temp/ humidity	9
3	3	Reflow@255°C	Ambient temp/ humidity	9
3	3	Reflow simulation @215°C	High temp/ humidity	9
3	3	Reflow@255°C	High temp/ humidity	9
3	3	Reflow simulation @215°C	Thermal cycle	9
3	3	Reflow@255°C	Thermal cycle	9

Note: 1. All preconditioning includes an initial four weeks at ambient.

Table 4. Whisker Length Based on Shorting Potential

Device Pitch	Typical Min. Gap Between Leads ¹	Max. Allowable Whisker Length in Application (= 1/2 min typical gap)	Max. Allowable Whisker Length in Testing (safety factor = 2/3 max. distance)	Max. Allowable Whisker Length in Testing (safety factor = 1/2 max. distance)
Discrete device (2 pin)	200 µm	100 µm	67 µm	50 µm
0.65 mm to < 1.27 mm	150-200 µm ⁽²⁾ (JEDEC MS-204)	75 – 100 µm	51 – 67 µm	38-50 µm
0.5mm to < 0.65 mm	125–150 µm ⁽²⁾ (JEDEC MS-204)	63 -75 µm	42-51 µm	32-38 µm ⁽³⁾
0.4mm to < 0.5mm	120 µm ⁽²⁾ (JEDEC MO-194B)	60 µm	40 µm ⁽³⁾	30 µm ⁽³⁾

Notes: 1. Numbers in table do not account for dambar protrusion, which is a risk area. 2. Allowance included in numbers for bent leads. 3. The red numbers indicate where a 40 µm whisker does not meet requirements when using a 2:1 safety factor.