

## FSC MSL Declaration of Conformity

1. Purpose : MSL( Moisture Sensitivity Levels) specification statement for all FSC products
2. Scope : For all FSC SMD IC
3. Responsibilities : QA
4. Reference :
  - 4.1 JEDEC, J-STD-020
  - 4.2 JEDEC, J-STD-033
5. Description
  - 5.1 FSC products level : All FSC products meet JEDEC Level 3 (unless otherwise specified on data sheet).
  - 5.2 Reflow : Peak package body temperature : 260°C
  - 5.3 Shelf life : Calculated shelf life in sealed bag : 12 months at < 40°C and 60% RH.
  - 5.4 Floor Life Time : Refer following table

Level	Floor Life (out of bag) at factory ambient ≤30°C/60% RH or as stated
1	Unlimited at ≤30°C/85% RH
2	1 year
2a	4 weeks
3	168 hours
4	72 hours
5	48 hours
5a	24 hours
6	Mandatory bake before use. After bake, must be reflowed within the time limit specified on the label.

After bag is opened, devices that will be subjected to reflow solder or other high temperature process must be,

a) Mounted within 168 hours of factory conditions ≤ 30°C/60% RH, or

5.6 Restore floor life time : If the floor life time limit is exceeded they should be baked according below Table 4-1 to restore the floor life.

**Table 4-1 Reference Conditions for Drying Mounted or Unmounted SMD Packages  
 (User Bake: Floor life begins counting at time = 0 after bake)**

Package Body	Level	Bake @ 125°C		Bake @ 90°C ≤5% RH		Bake @ 40°C ≤5% RH	
		Exceeding Floor Life by >72 h	Exceeding Floor Life by ≤72 h	Exceeding Floor Life by >72 h	Exceeding Floor Life by ≤72 h	Exceeding Floor Life by >72 h	Exceeding Floor Life by ≤72 h
Thickness ≤1.4 mm	2	5 hours	3 hours	17 hours	11 hours	8 days	5 days
	2a	7 hours	5 hours	23 hours	13 hours	9 days	7 days
	3	9 hours	7 hours	33 hours	23 hours	13 days	9 days
	4	11 hours	7 hours	37 hours	23 hours	15 days	9 days
	5	12 hours	7 hours	41 hours	24 hours	17 days	10 days
	5a	16 hours	10 hours	54 hours	24 hours	22 days	10 days
Thickness >1.4 mm ≤2.0 mm	2	18 hours	15 hours	63 hours	2 days	25days	20 days
	2a	21 hours	16 hours	3 days	2 days	29 days	22 days
	3	27 hours	17 hours	4 days	2 days	37 days	23 days
	4	34 hours	20 hours	5 days	3 days	47 days	28 days
	5	40 hours	25 hours	6 days	4 days	57 days	35 days
	5a	48 hours	40 hours	8 days	6 days	79 days	56 days
Thickness >2.0 mm ≤4.5 mm	2	48 hours	48 hours	10 days	7 days	79 days	67 days
	2a	48 hours	48 hours	10 days	7 days	79 days	67 days
	3	48 hours	48 hours	10 days	8 days	79 days	67 days
	4	48 hours	48 hours	10 days	10 days	79 days	67 days
	5	48 hours	48 hours	10 days	10 days	79 days	67 days
	5a	48 hours	48 hours	10 days	10 days	79 days	67 days

5.7 Storage of Devices not sealed in bag : It may be placed in a dry atmosphere cabinet, maintained at ≤10% RH.

6. ESD Protection : Proper ESD handling precaution should be observed, per EIA-625.

Quality Assurance Dept.

