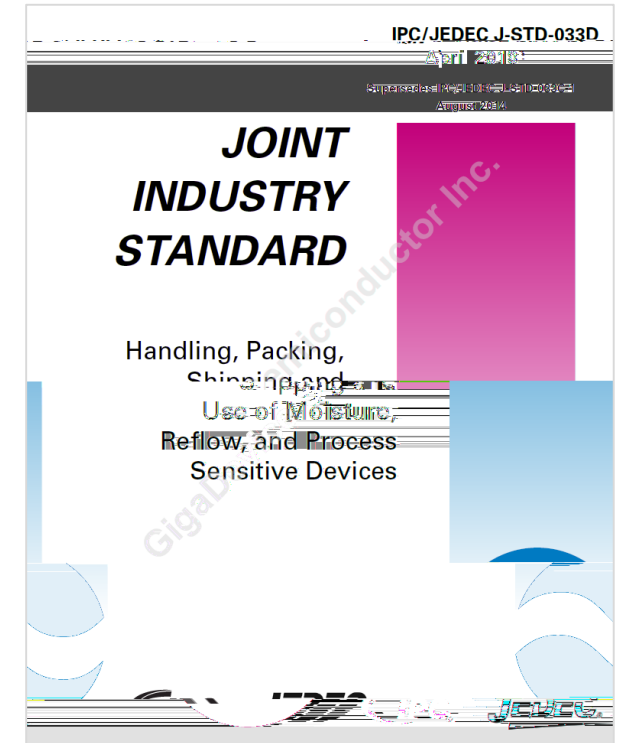




GigaDevice





5.3.2 Shelf Life The minimum calculated shelf life is 12 months from bag seal date or indicated on barcode. If the actual shelf life has exceeded 12 months from the bag seal date and the humidity indicator card (HIC) (see 5.5.1) indicates that baking is not required, then it is safe to reflow the devices per the original MSL rating. However, unanticipated factors other than reflow sensitivity could affect the MSL rating.

to

Date

Name of the Manufacturer:
 Lot No.:
 Date of Manufacture:
 Date of Expiry:

Mfg. No.:
 Final Use (out of four life limit):

1. 2. 3. 4.

1 year
 4 weeks
 168 hours
 72 hours
 48 hours
 24 hours
 Mandatory bake before use. After

bake, must be refilled within the time limit specified on the label

Table 4-1 Reference Conditions for Drying Mounted or Unmounted SMD Packages

Package Body	Level	Bake @ 125 °C + 10/-0 °C < 5% RH	Bake @ 90 °C + 8/-0 °C ≤ 5% RH	Bake @ 40 °C + 5/-0 °C ≤ 5% RH
2, 2a, 3, 4, 5, 5a	Anytime ≤ 10 °C/65% RH	reset	NA	Table 4-1
2, 2a, 3, 4, 5, 5a	> floor life ≤ 30 °C/60% RH	reset	NA	Table 4-1
2, 2a, 3	> 13 hrs ≤ 30 °C/60% RH	reset	NA	Table 4-1
2, 2a, 3	< 12 hrs ≤ 30 °C/60% RH	reset	5X exposure time ≤ 10% RH	NA
2, 2a, 3	Cumulative time < floor life ≤ 30 °C/60% RH	pause	Anytime ≤ 10% RH	NA
4, 5, 5a	> 8 hrs ≤ 30 °C/60% RH	reset	NA	Table 4-1
4, 5, 5a	≤ 8 hrs ≤ 30 °C/60% RH	reset	10X exposure time ≤ 10% RH	Table 4-1

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 + 10/-0 °C < 5% RH	Bake @ 90 °C + 8/-0 °C ≤ 5% RH	Bake @ 40 °C + 5/-0 °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 < 0.5 mm	2	Not Required (see Note 4)	Not Required (see Note 4)	Not Required (see Note 4)
	2a	1 hour	1 hour	2 hours
	3	1 hour	1 hour	2 hours
	5	1 hour	1 hour	2 hours
Thickness 0.5 mm ≤ 1.4 mm	2	Not Required (see Note 4)	Not Required (see Note 4)	Not Required (see Note 4)
	2a	4 hours	3 hours	15 hours
	3	4 hours	3 hours	15 hours
	5	4 hours	3 hours	15 hours
Thickness > 1.4 mm ≤ 2.0 mm	2	Not Required (see Note 4)	Not Required (see Note 4)	Not Required (see Note 4)
	2a	8 hours	6 hours	25 hours
	3	8 hours	6 hours	25 hours
	5	10 hours	6 hours	28 hours
Thickness > 2.0 mm ≤ 4.5 mm	2	18 hours	15 hours	60 hours
	2a	27 hours	20 hours	80 hours
	3	27 hours	20 hours	80 hours
	5	34 hours	20 hours	100 hours
Thickness > 4.5 mm ≤ 20 mm	2	48 hours	48 hours	168 hours
	2a	48 hours	48 hours	168 hours
	3	48 hours	48 hours	168 hours
	5	48 hours	48 hours	168 hours
Exception for BGA package > 17 mm x 17 mm or any stacked	2-5a	96 hours (See Note 2)	As above per package thickness and level	Not applicat





