MAX7347 Q

Home / Knowledge Base / 000095584

## ARE THERE PRODUCT OR PACKAGE EXCEPTIONS TO THE STANDARD PB-FREE OR EUTECTIC QUALIFICATION REFLOW PROFILES? HOW DO YOU DETERMINE WHICH PRODUCTS THESE ARE AND WHAT IS THE DIFFERENT PROFILE TO USE FOR EACH?

Views: 72

Yes, there are exceptions due to the materials used in certain package types. These products have special suffixes added to the normal product part number as listed below with their profiles.

Product Part Numbers with G36 suffixes have a peak temperature of 225 (-5/+0) degrees Celsius.

Profile	JEDEC-020D	
Average ramp-up rate (Ts max to T peak)	3°C/seconds max.	
Preheat:		
-Temperature Min (Ts min)	100°C	
-Temperature Max (Ts max)	150°C	
-Time (Ts min to Ts max)	60 to 120 seconds	
Time maintained above:		
-Temperature (TL)	183°C	
-Time (tL)	60 to 150 seconds	
Peak temperature	220°C–225°C	
Time within 5°C of the peak temp (225°C)	20 seconds	
Average ramp-down rate (T peak to Ts max)	6°C/seconds max	
Time 25°C to peak temperature	6 minutes max.	

Product Part Numbers with G42 suffixes and Power Cap family products have a peak temperature of 240 (-5/+0) degrees Celsius.

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Profile	JEDEC-020D	
Average ramp-up rate (Ts max to T peak)	3°C/seconds max.	
Preheat:		
-Temperature Min (Ts min)	100°C	
-Temperature Max (Ts max)	150°C	
-Time (Ts min to Ts max)	60 to 120 seconds	
Time maintained above:		
-Temperature (TL)	183°C	
-Time (tL)	60 to 150 seconds	
Peak temperature	235°C–240°C	
Time within 5°C of the peak temp (240°C)	20 seconds	
Average ramp-down rate (T peak to Ts max)	6°C/seconds max	
Time 25°C to peak temperature	6 minutes max.	

Product Part Numbers with G13, G14, G15, G27, G28, GC6 suffixes have a peak temperature of 250 (-5/+0) degrees Celsius.

Profile	JEDEC-020D
Average ramp-up rate (Ts max to T peak)	3°C/seconds max.
Preheat:	
-Temperature Min (Ts min)	150°C
-Temperature Max (Ts max)	200°C
-Time (Ts min to Ts max)	60 to 120 seconds
Time maintained above:	
-Temperature (TL)	217°C
-Time (tL)	60 to 150 seconds
Peak temperature	245°C–250°C
Time within 5°C of the peak temp (250°C)	30 seconds
Average ramp-down rate (T peak to Ts max)	6°C/seconds max
Time 25°C to peak temperature	8 minutes max.

Product Part Numbers with G16 suffixes have a peak temperature of 245 (+0/-5) degrees Celsius.

Profile	JEDEC-020D	
Average ramp-up rate (Ts max to T peak)	3°C/seconds max.	
Preheat:		
-Temperature Min (Ts min)	150°C	
-Temperature Max (Ts max)	200°C	
-Time (Ts min to Ts max)	60-120 seconds	
Time maintained above:		
-Temperature (TL)	217°C	
-Time (tL)	60-150 seconds	
Peak temperature	245°C	
Time within 5°C of the peak temp (245°C)	30 seconds	
Average ramp-down rate (T peak to Ts max)	6°C/seconds max	
Time 25°C to peak temperature	8 minutes max.	