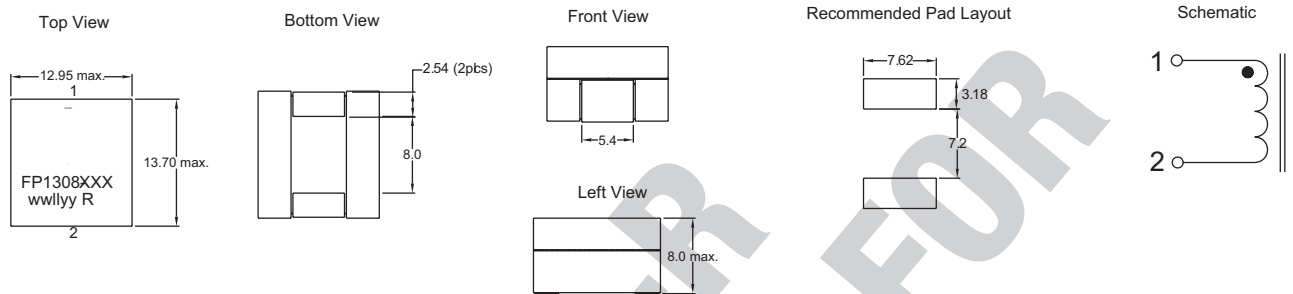


## Dimensions - mm



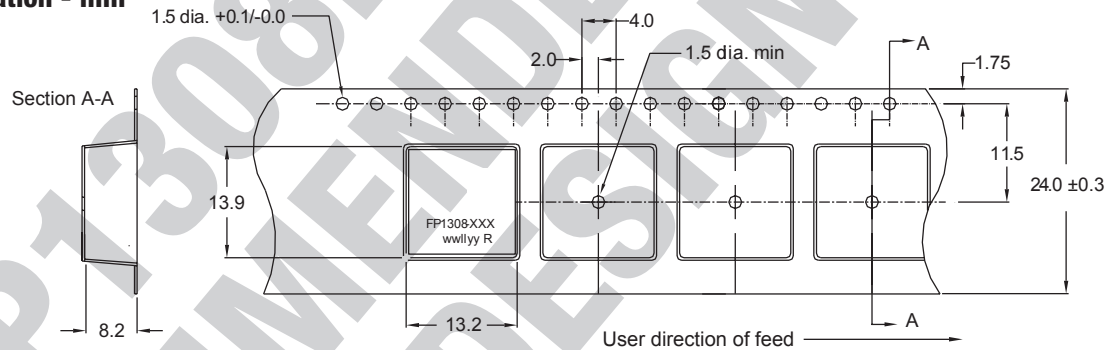
Part Marking: FP1308

xxx = Inductance value in  $\mu\text{H}$ . (R = Decimal point). If no "R" is present, then last character is # Of zeros

wwlyy = Date code

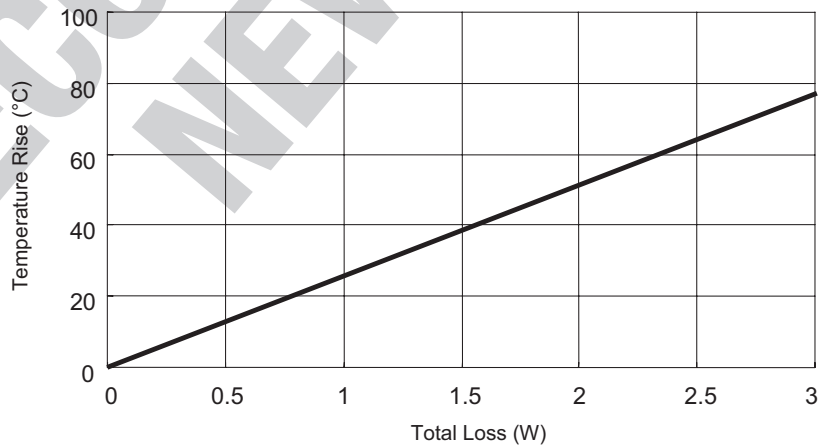
R = Revision level

## Packaging Information - mm

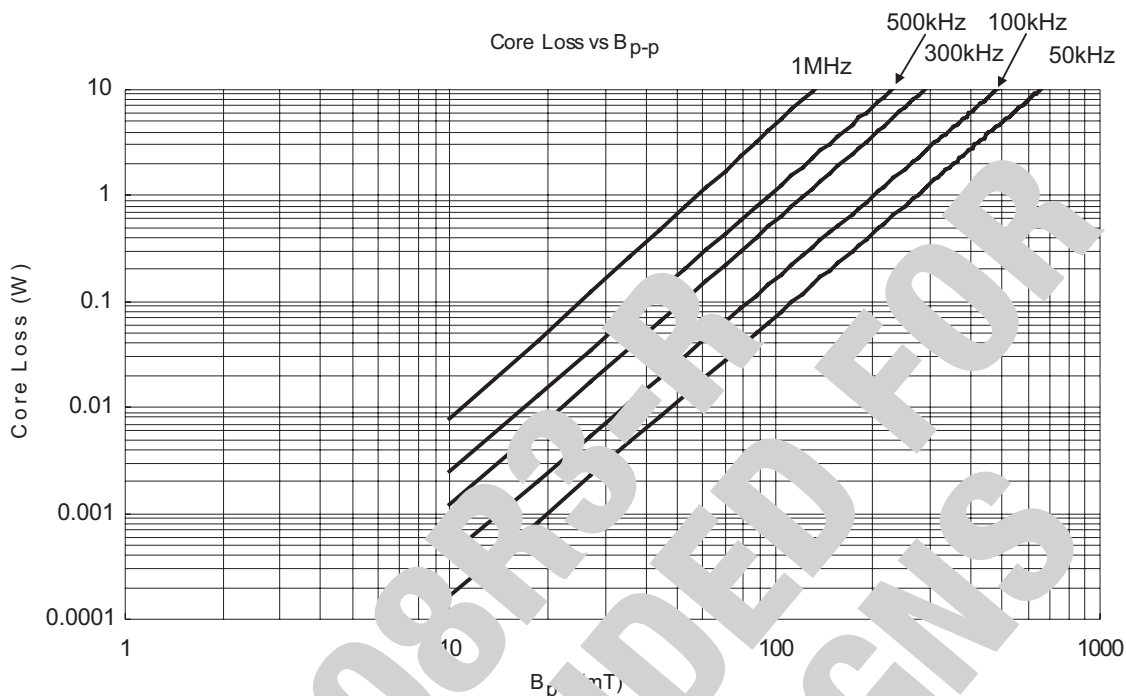


Supplied in tape-and-reel packaging, 400 parts per reel, 13" diameter reel.

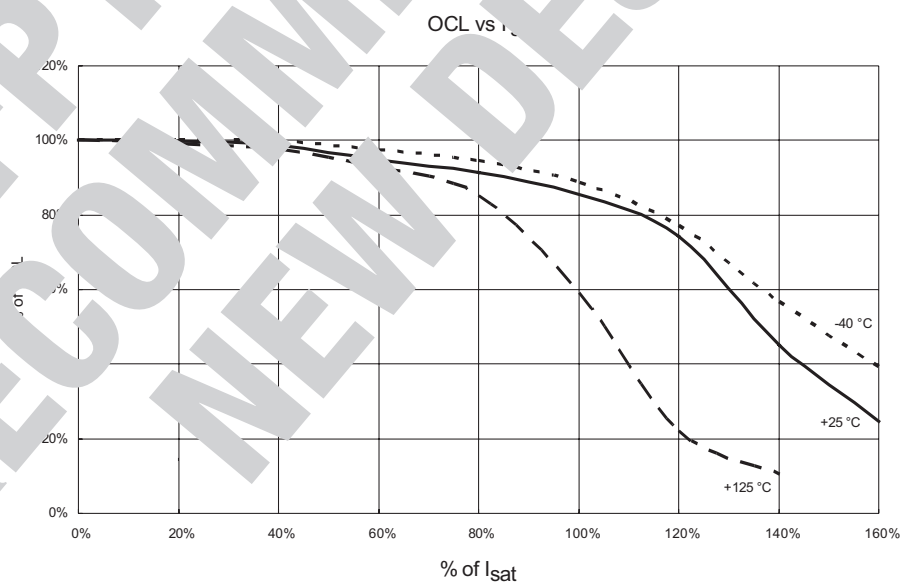
## Temperature Rise vs. Total Loss



## Core Loss



## Inductance Characterist



## Solder Reflow Profile

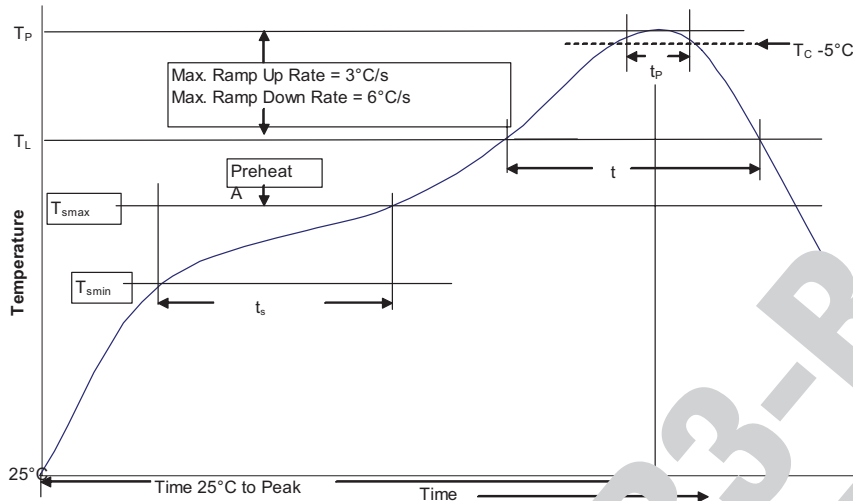


Table 1 - Standard SnPb Solder ( $T_P$ )

| Package Thickness   | Volume $\text{mm}^3$ <350 | Volume $\text{mm}^3$ $\geq 350$ |
|---------------------|---------------------------|---------------------------------|
| <2.5mm              | 235°C                     | 220°C                           |
| $\geq 2.5\text{mm}$ | 220°C                     |                                 |

Table 2 - Lead Free Solder ( $T_P$ )

| Package Thickness   | Volume $\text{mm}^3$ <350 | Volume $\text{mm}^3$ 350 - 2000 | Volume $\text{mm}^3$ >2000 |
|---------------------|---------------------------|---------------------------------|----------------------------|
| <1.6mm              | 260°C                     | 260°C                           | 260°C                      |
| 1.6 - 2.5mm         | 260°C                     | 250°C                           | 245°C                      |
| $\geq 2.5\text{mm}$ | 260°C                     | 245°C                           | 245°C                      |

## Reference JDEC J-STD-020

| Profile Feature  | Standard SnPb Solder | Lead Free Solder |
|--|----------------------|------------------|
| Preheat and Soak   |                      |                  |
| • Temperature min. ( $T_{smin}$ )  | 100°C                | 150°C            |
| • Temperature max. ( $T_{smax}$ )  | 250°C                | 200°C            |
| • Time ( $T_{smin}$ to $T_{smax}$ ) ( $t_s$ )                                      | 60-120 Seconds       | 60-120 Seconds   |
| Average ramp up rate $T_{smax}$ to $T_P$   | 3°C/ Second Max.     | 3°C/ Second Max. |
| Liquidous temperature ( $T_L$ )  | 217°C                | 217°C            |
| Time at liquidous ( $t_L$ )  | 60-150 Seconds       | 60-150 Seconds   |
| Peak package body temperature ( $T_P$ )*   | Table 1              | Table 2          |
| Time ( $t_P$ )** within 5 °C of the specified classification temperature ( $T_P$ ) | 30 Seconds**         | 30 Seconds**     |
| Average ramp-down rate ( $T_P$ to $T_{smax}$ )                                     | 6°C/ Second Max.     | 6°C/ Second Max. |
| Time 25°C to Peak Temperature  | 8 Minutes Max.       | 8 Minutes Max.   |

\* Tolerance for peak profile temperature ( $T_P$ ) is defined as a supplier minimum and a user maximum.

\*\* Tolerance for time at peak profile temperature is defined as a supplier minimum and a user maximum.

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Printed in USA  
Publication No. DS4313 BU-SB111090  
June 2017