40W High-Integration, High-Efficiency PMIC for Wireless Power Transmitter

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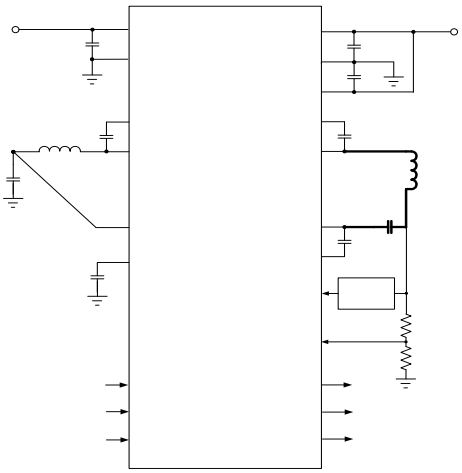
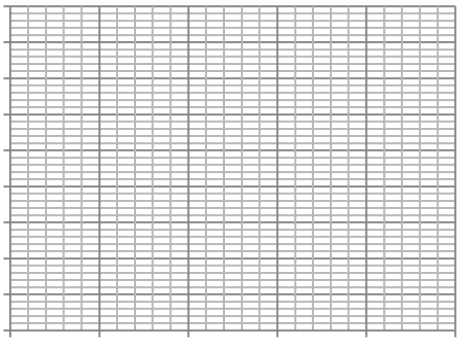




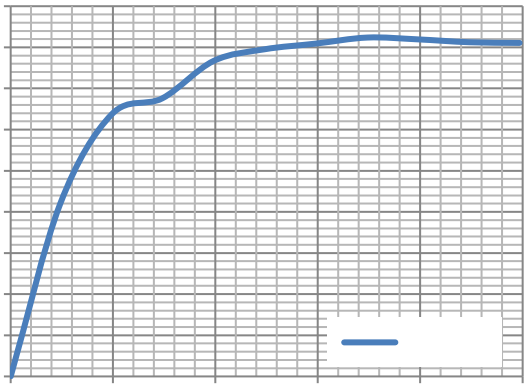
ORDERABLE DEVICE	PACKAGING TYPE	STANDARD PACK QTY	PACKAGE MARKING	PINS	PACKAGE DESCRIPTION	MSL

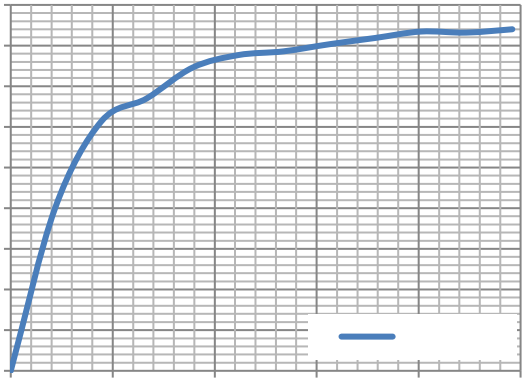
PARAMETER	DEFINITION	MIN	MAX	UNIT

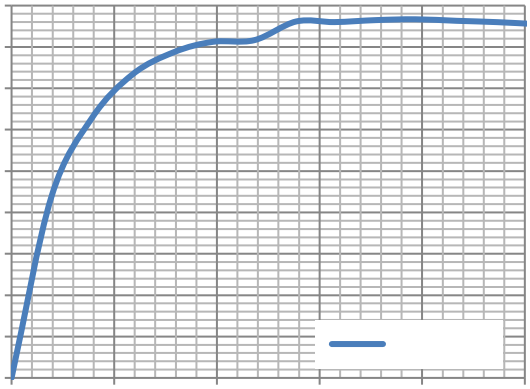
PARAMETER	DEFINITION	MIN	MAX	UNIT

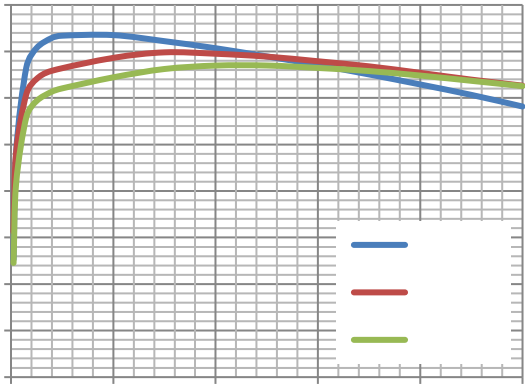
PARAMETER	THERMAL METRIC	FCTQFN4X4-22L	UNIT

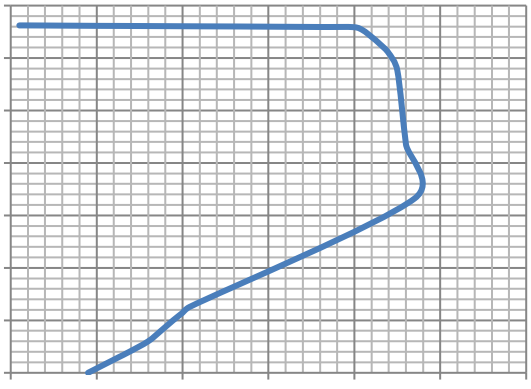
SYMBOL	PARAMETER	TEST CONDITION	MIN	TYP	MAX	UNIT
Input supplies and UVLO						

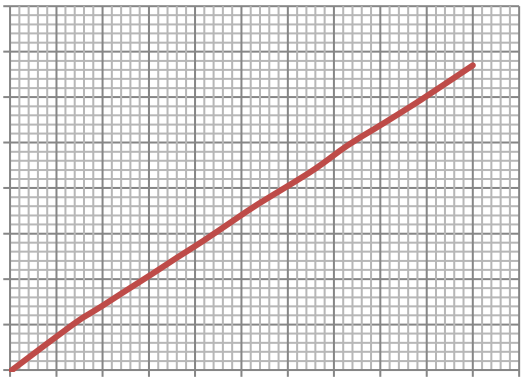










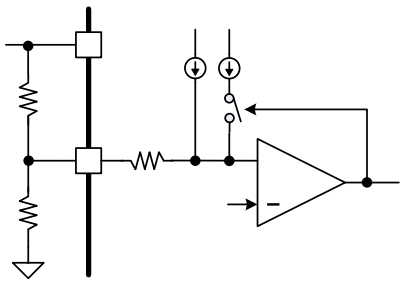


Overview

Enable and Start up Sequence

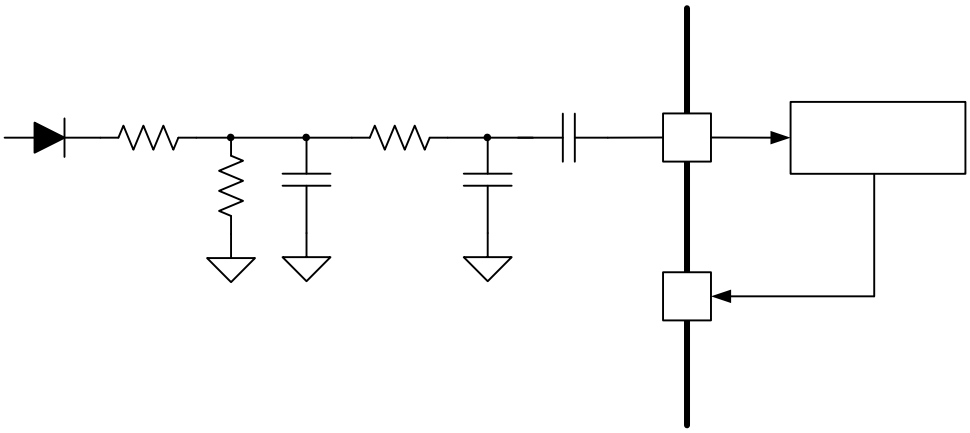
$$V_{rise} = 1.19 * \left(1 + \frac{R1}{R2}\right) - 1.5uA * R1$$

$$V_{fall} = 1.1 * \left(1 + \frac{R1}{R2}\right) - 5.5uA * R1$$



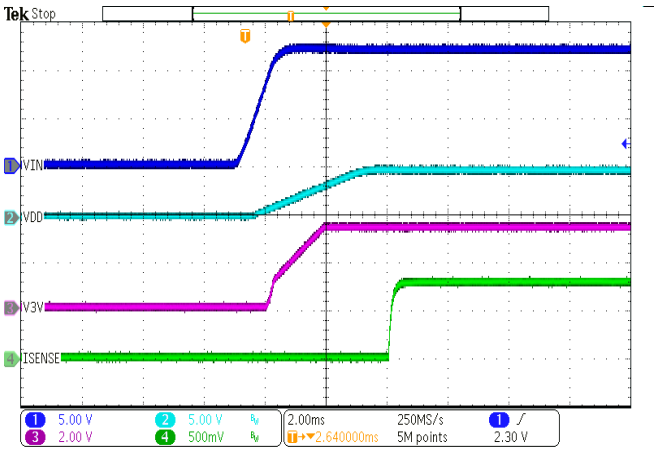
5V Output Buck Converter

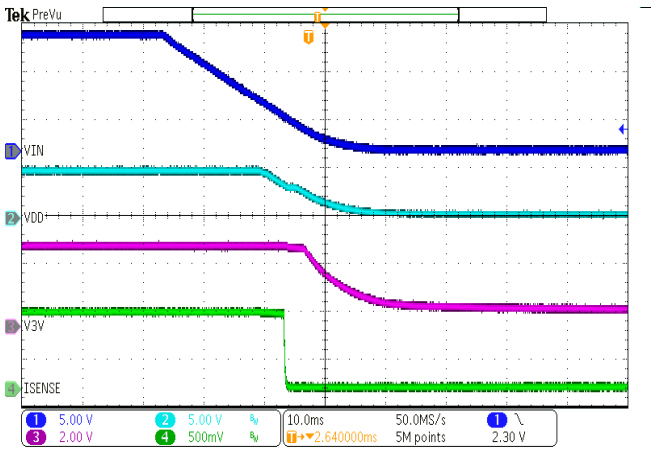
Full Bridge Power Stage and PWM Control

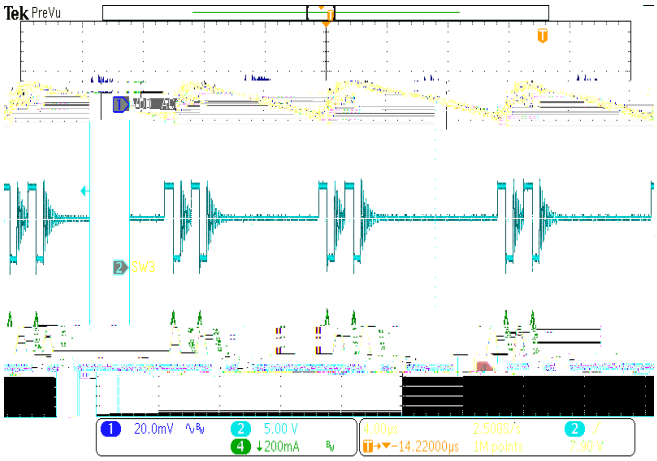


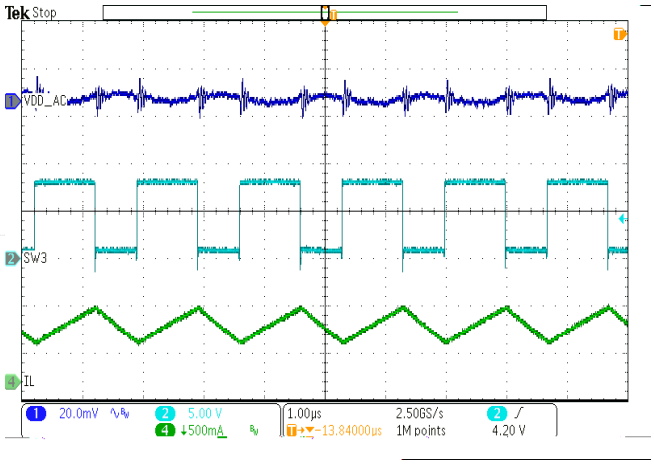
Thermal Shutdown

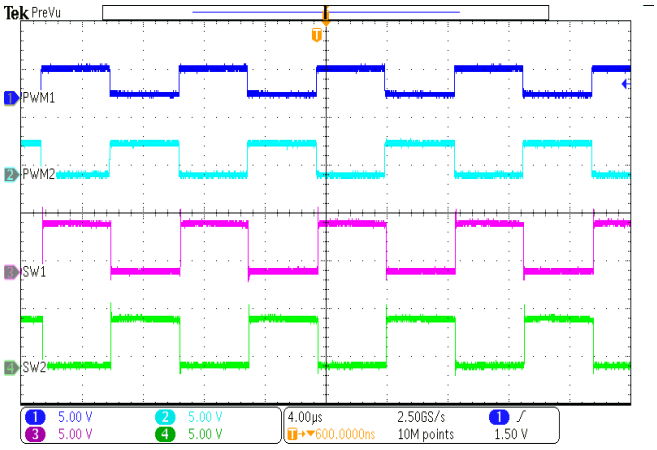
Application Waveforms

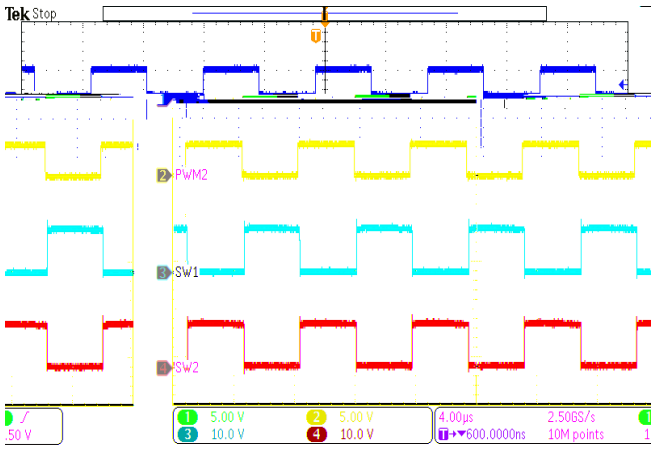




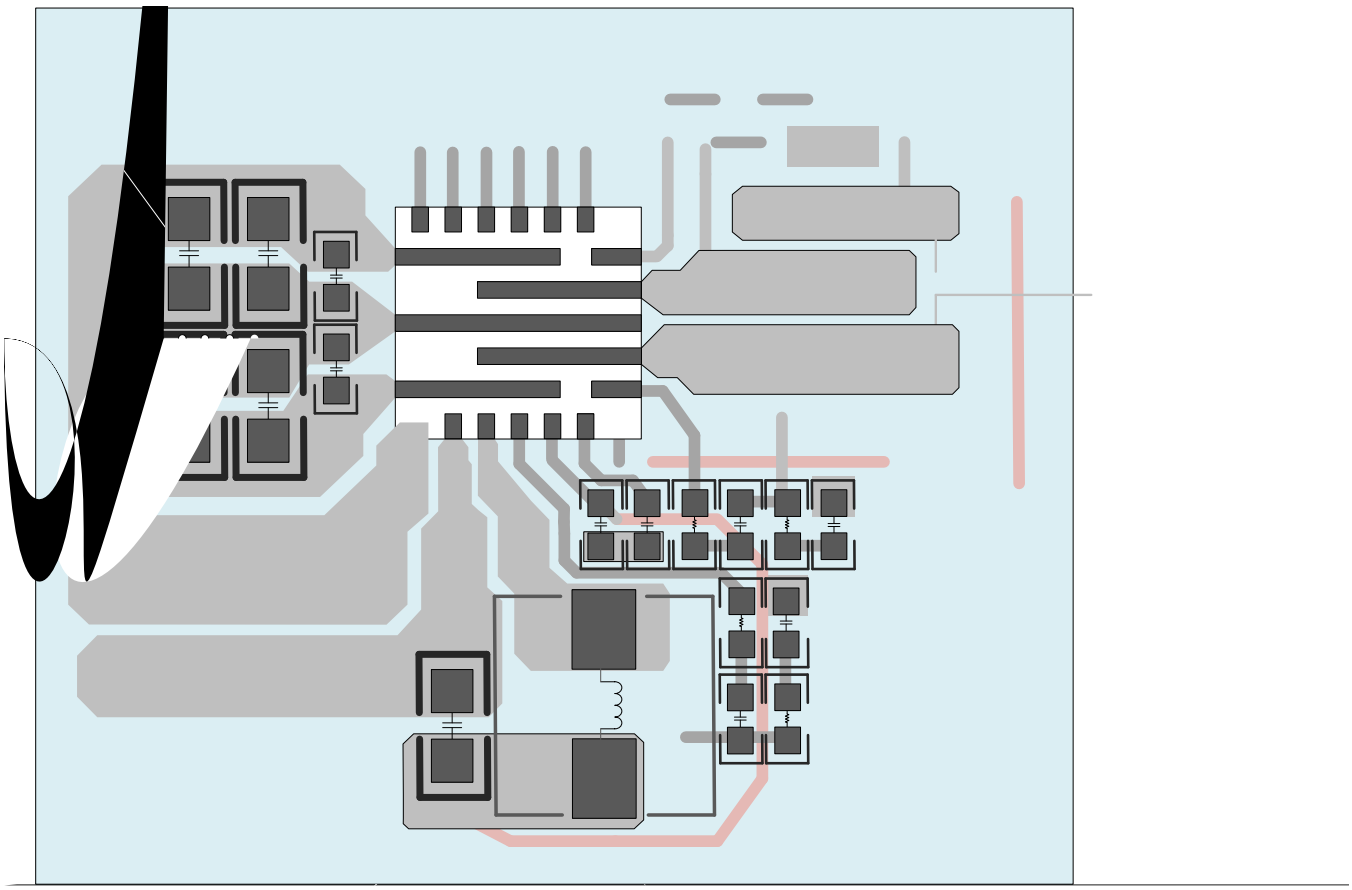


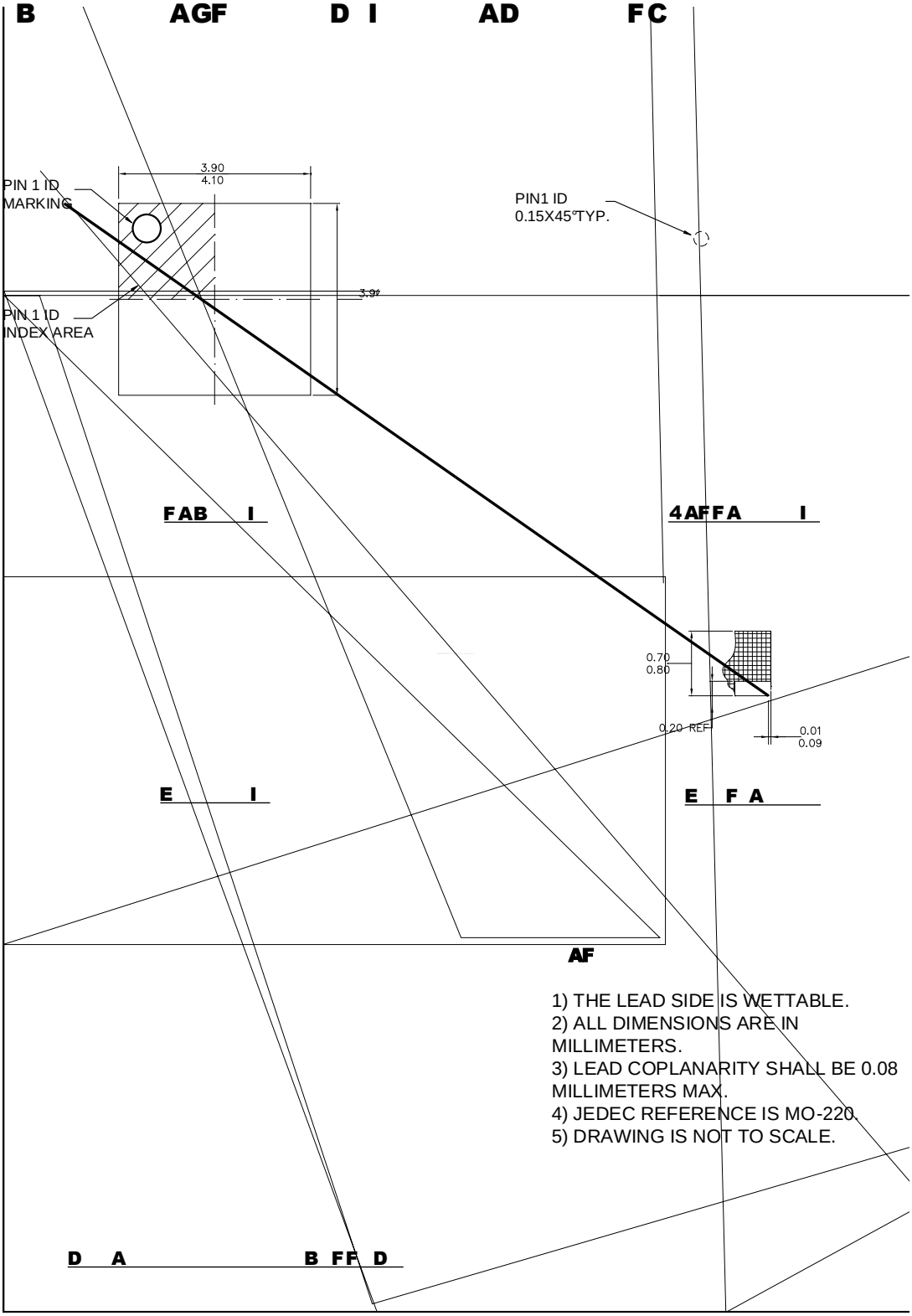


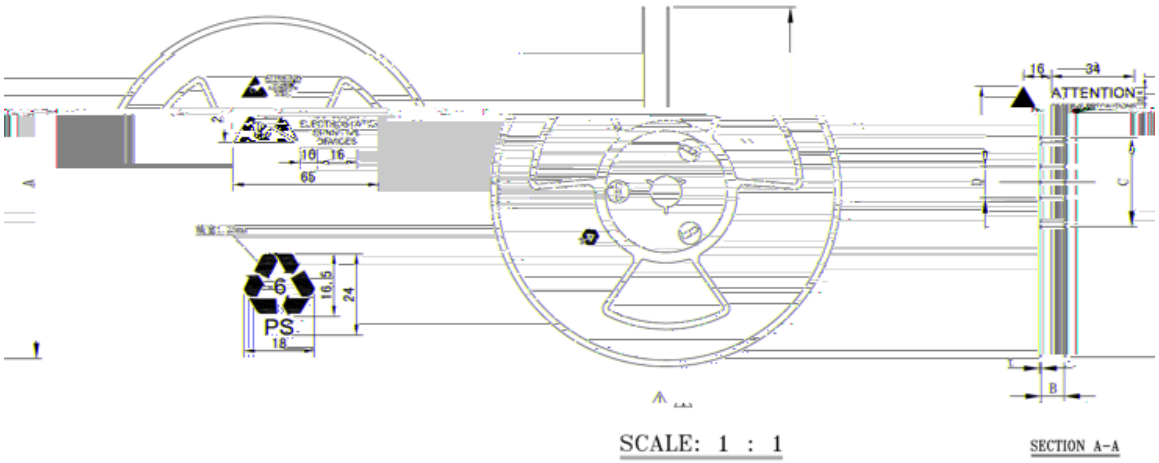


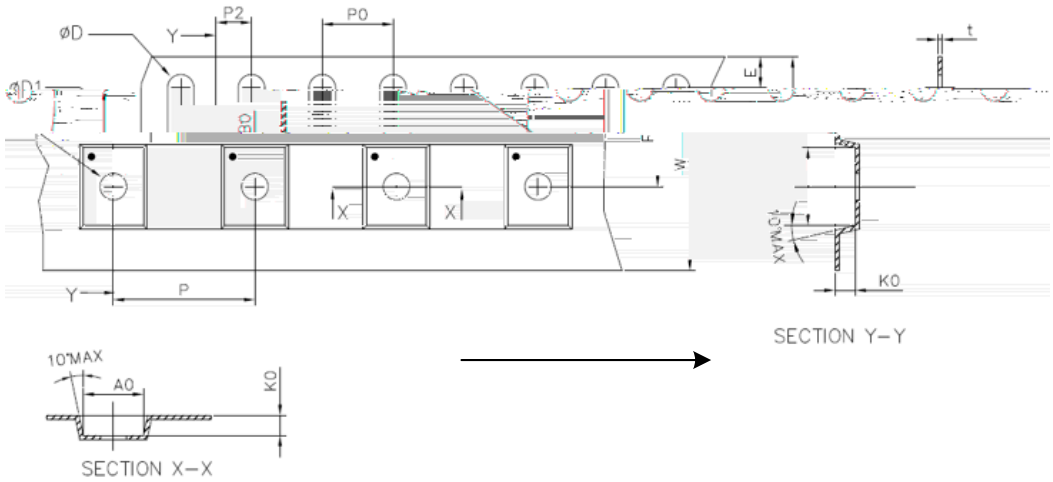


Layout Guideline




B AGF D I AD FC
3.90
4.10
PIN 1 ID
MARKING
PIN1 ID
0.15X45°TYP.
3.90
PIN 1 ID
INDEX AREA
FAB I
4AFFA I
0.70
0.80
0.20 REF
0.01
0.09
E I
E F A
AF
1) THE LEAD SIDE IS WETTABLE.
2) ALL DIMENSIONS ARE IN MILLIMETERS.
3) LEAD COPLANARITY SHALL BE 0.08 MILLIMETERS MAX.
4) JEDEC REFERENCE IS MO-220.
5) DRAWING IS NOT TO SCALE.
D A B FF D





+0.30 −0.10					

			+0.10 0	+0.25 0		