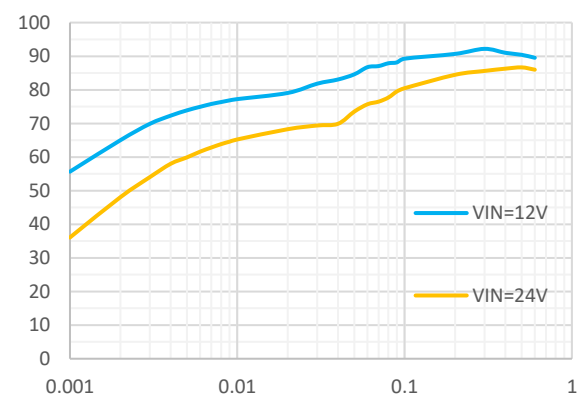
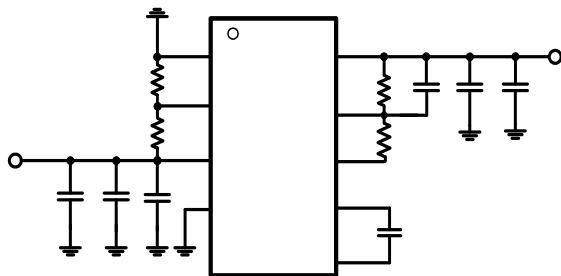
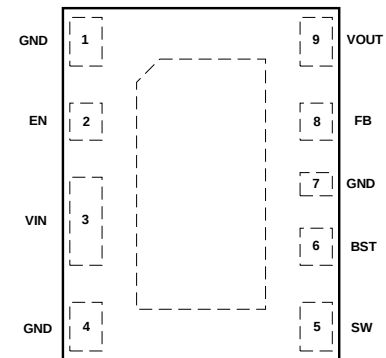




| ORDERABLE<br>DEVICE | PACKAGING<br>TYPE | STANDARD<br>PACK QTY | PINS | PACKAGE<br>DESCRIPTION | MSL |
|---------------------|-------------------|----------------------|------|------------------------|-----|
|                     |                   |                      |      |                        |     |

| DESCRIPTION | MIN | MAX | UNIT |
|-------------|-----|-----|------|
|             |     |     |      |
|             |     |     |      |
|             |     |     |      |



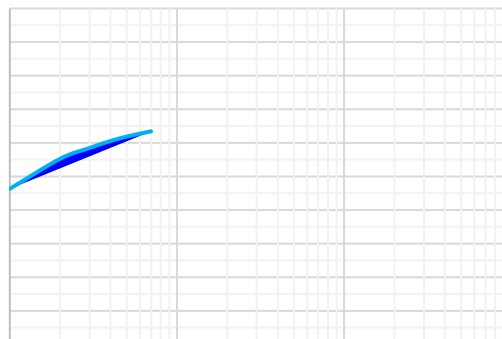
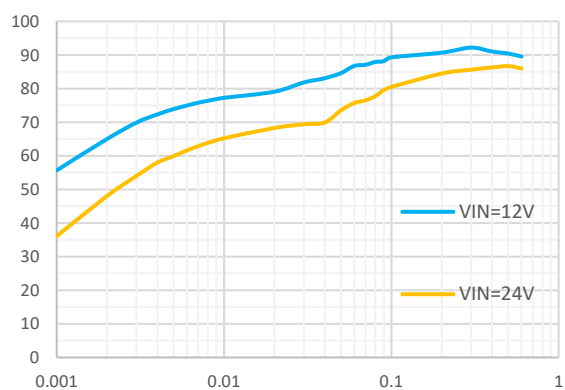
| NAME | NO. | PIN FUNCTION |
|------|-----|--------------|
|      |     |              |
|      |     |              |
|      |     |              |
|      |     |              |
|      |     |              |
|      |     |              |
|      |     |              |
|      |     |              |

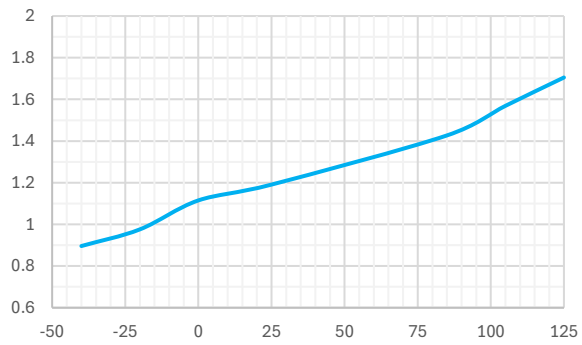
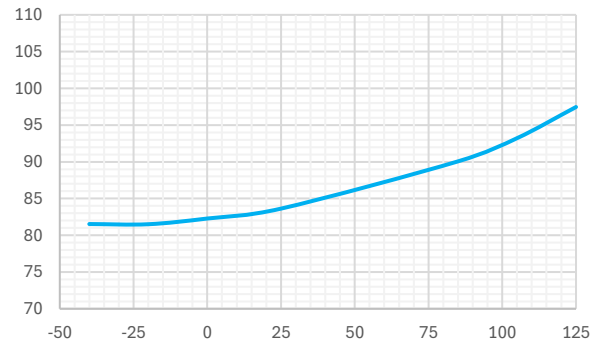
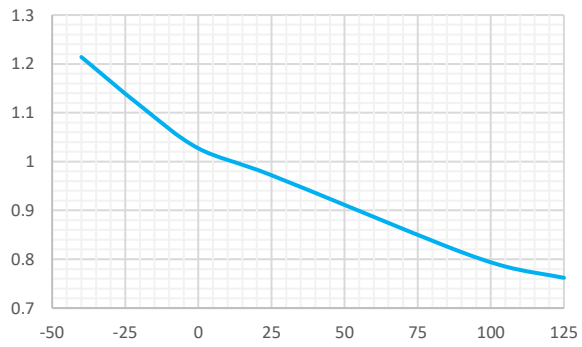
| PARAMETER | DEFINITION | MIN | MAX | UNIT |
|-----------|------------|-----|-----|------|
|           |            |     |     |      |
|           |            |     |     |      |

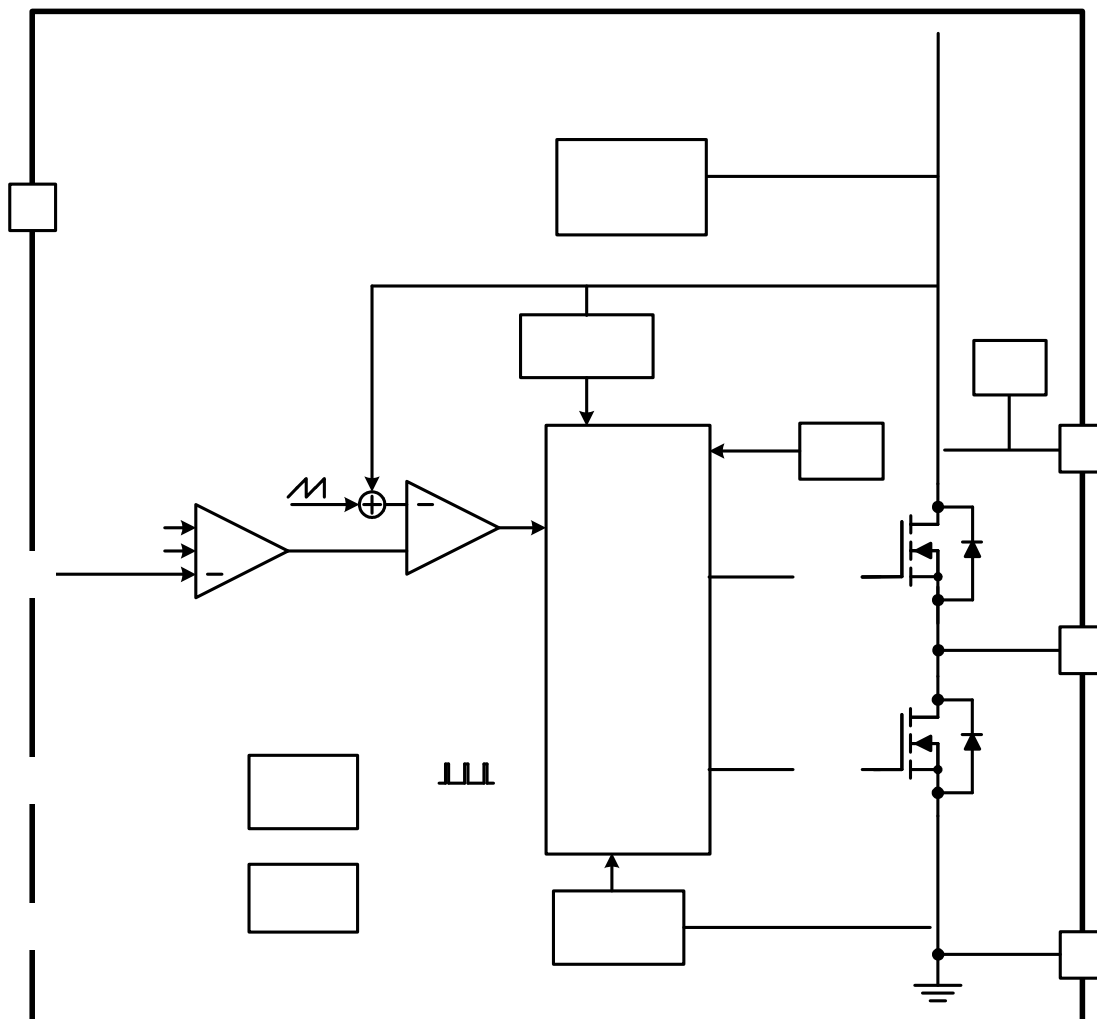
| PARAMETER | DEFINITION | MIN | MAX | UNIT |
|-----------|------------|-----|-----|------|
|           |            |     |     |      |
|           |            |     |     |      |

| PARAMETER | THERMAL METRIC | ECLGA3X3.8-9L | UNIT |
|-----------|----------------|---------------|------|
|           |                |               |      |
|           |                |               |      |
|           |                |               |      |
|           |                |               |      |
|           |                |               |      |

| SYMBOL                       | PARAMETER | TEST CONDITION | MIN | TYP | MAX | UNIT |
|------------------------------|-----------|----------------|-----|-----|-----|------|
| Power Supply and Output      |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
| Enable                       |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
| Feedback and Error Amplifier |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
| Current Limit                |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
| Switching Frequency          |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
| Soft Start Time              |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
| Protection                   |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |
|                              |           |                |     |     |     |      |

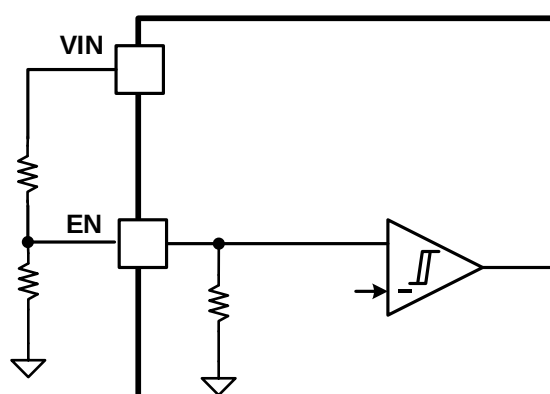






## Overview

## Peak Current Mode Control and Pulse Skipping Mode



\_\_\_\_\_

\_\_\_\_\_

Output Voltage

\_\_\_\_\_

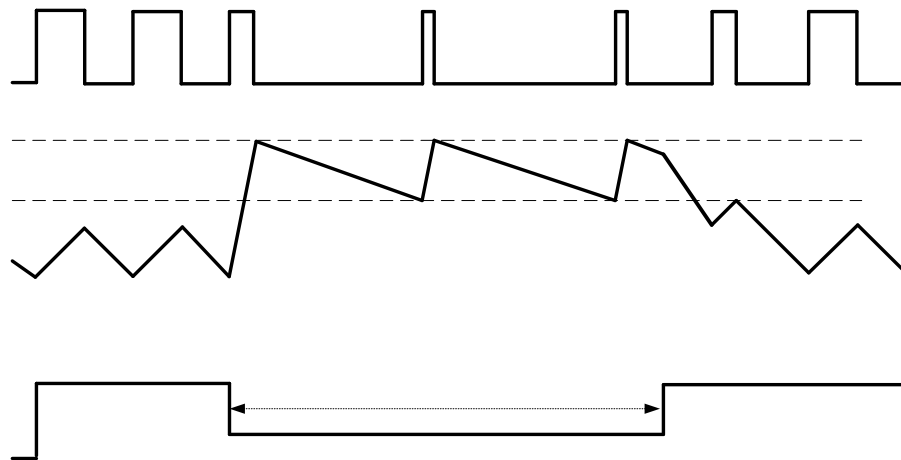
- 
-

Peak Current Limit

Bootstrap Voltage Regulator

Internal Soft-Start

Over Current Protection

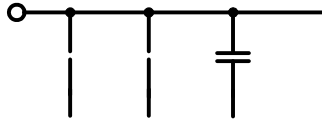


Over voltage Protection

Thermal Shutdown

◦  
◦

## Typical Application



Design Parameters

| Design Parameters | Example Value |
|-------------------|---------------|
|                   |               |
|                   |               |
|                   |               |
|                   |               |
|                   |               |

Output Voltage

•

| V <sub>OUT</sub> | R <sub>3</sub> | R <sub>4</sub> |
|------------------|----------------|----------------|
|                  |                |                |
|                  |                |                |
|                  |                |                |
|                  |                |                |
|                  |                |                |

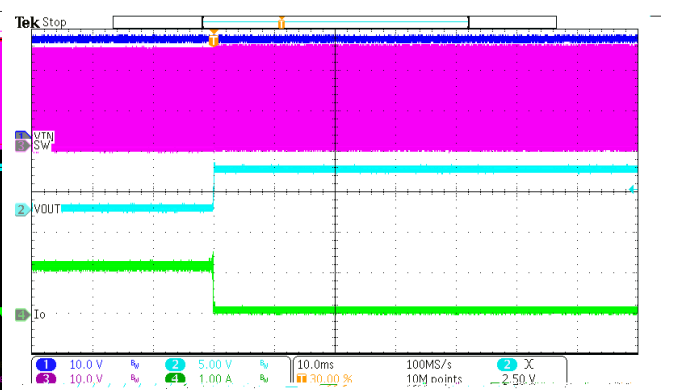
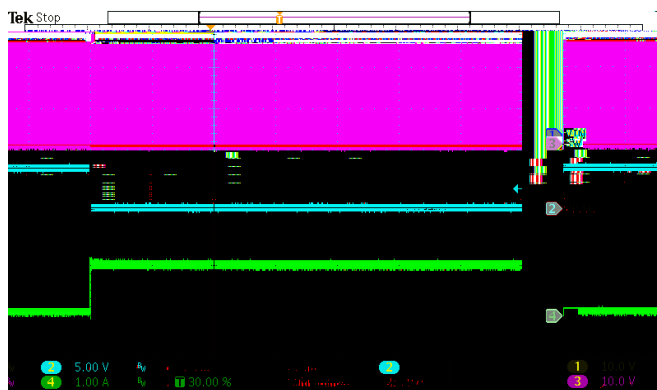
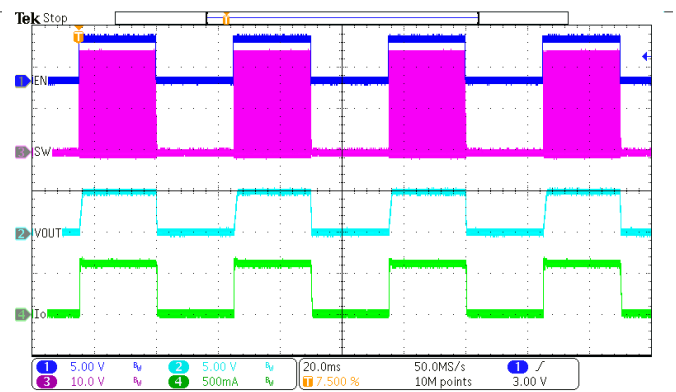
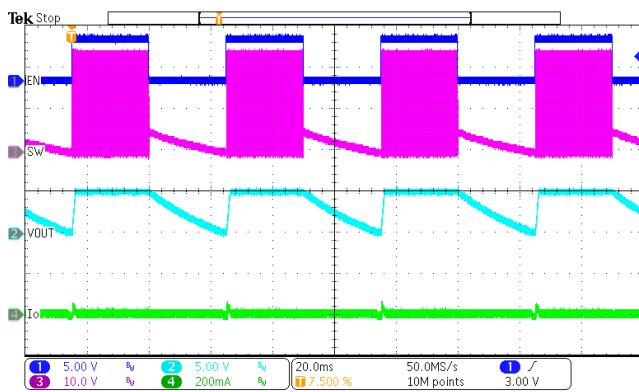
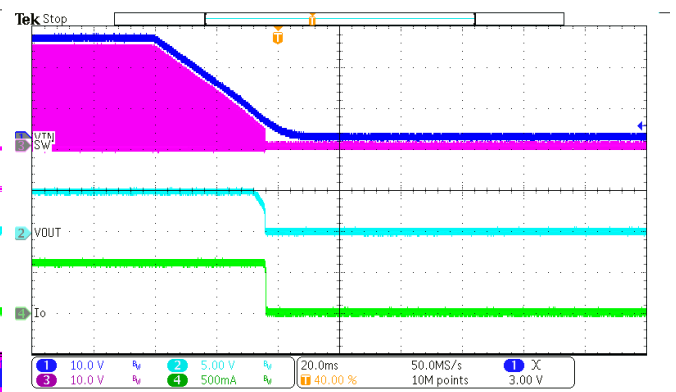
Under Voltage Lock-Out

\_\_\_\_\_

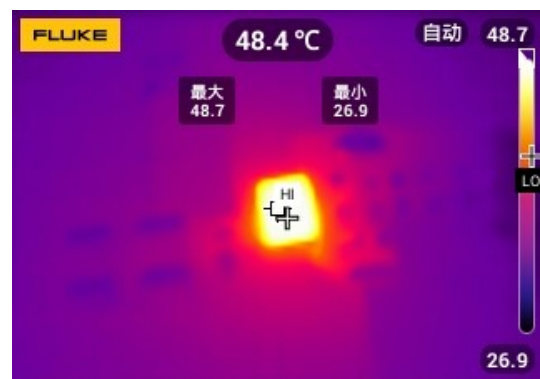
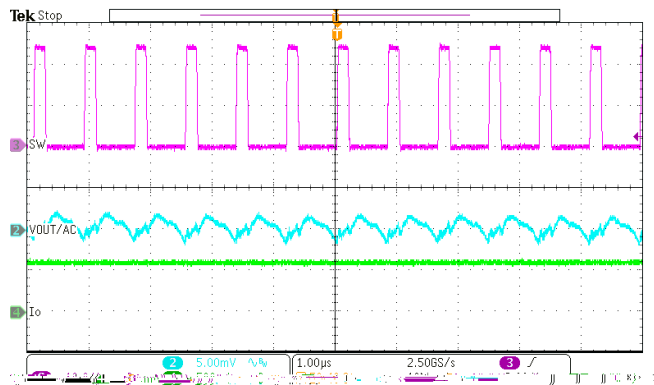
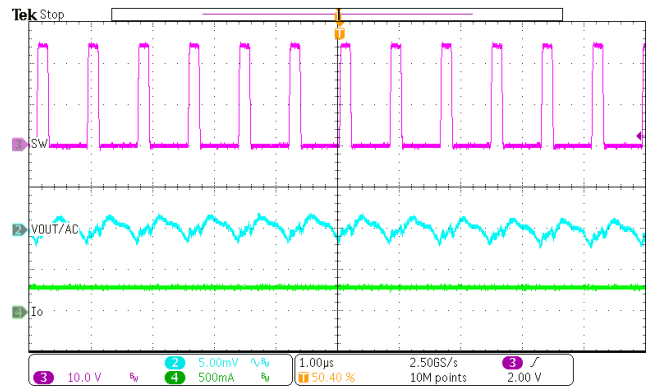
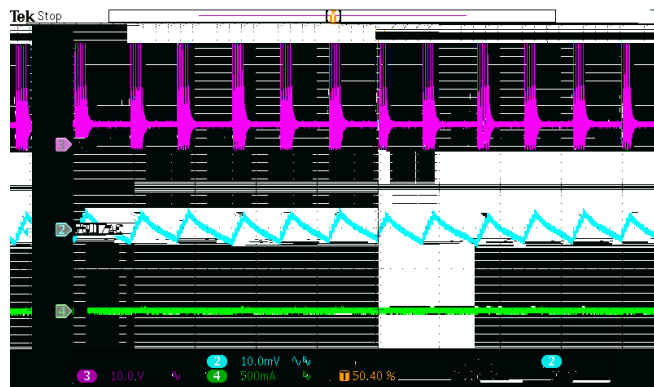
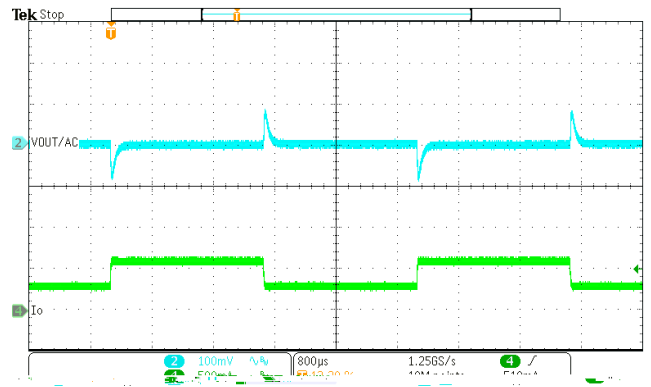
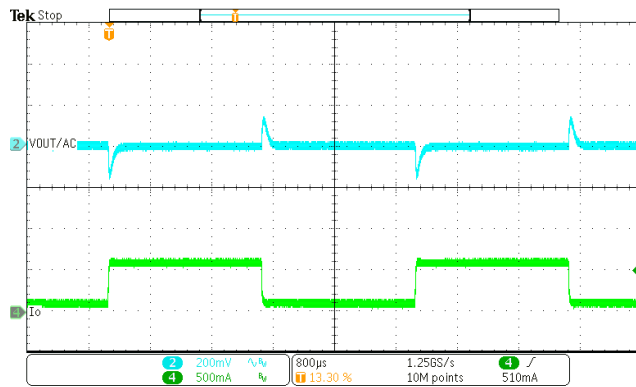
**Bootstrap Capacitor Selection**

**Output Capacitor Selection**

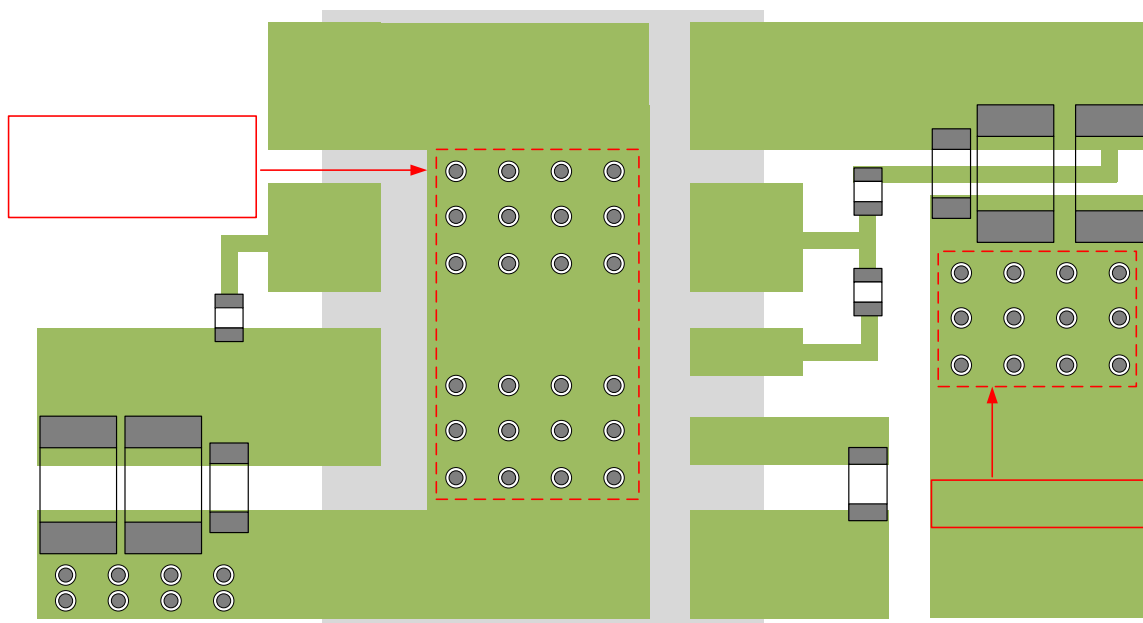
## Application Waveforms

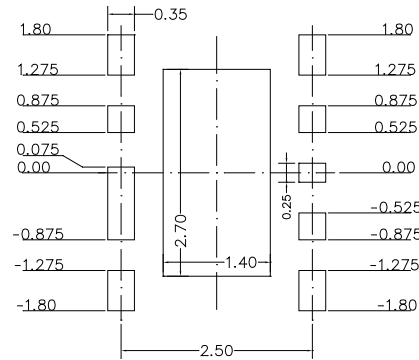
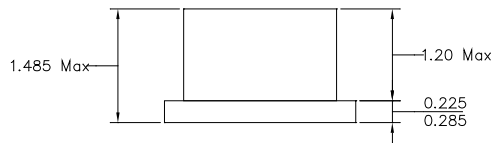
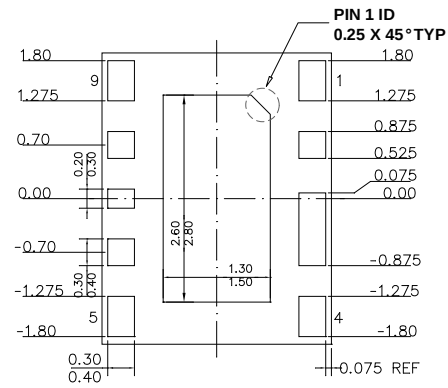
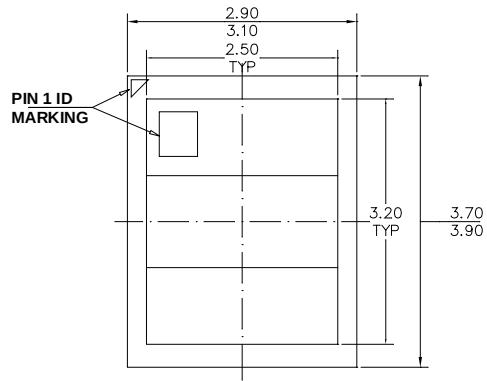


## Application Waveforms

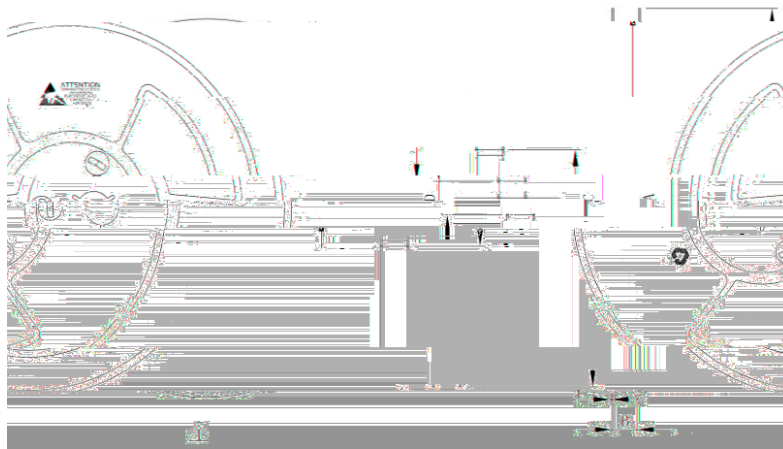


## Layout Guideline

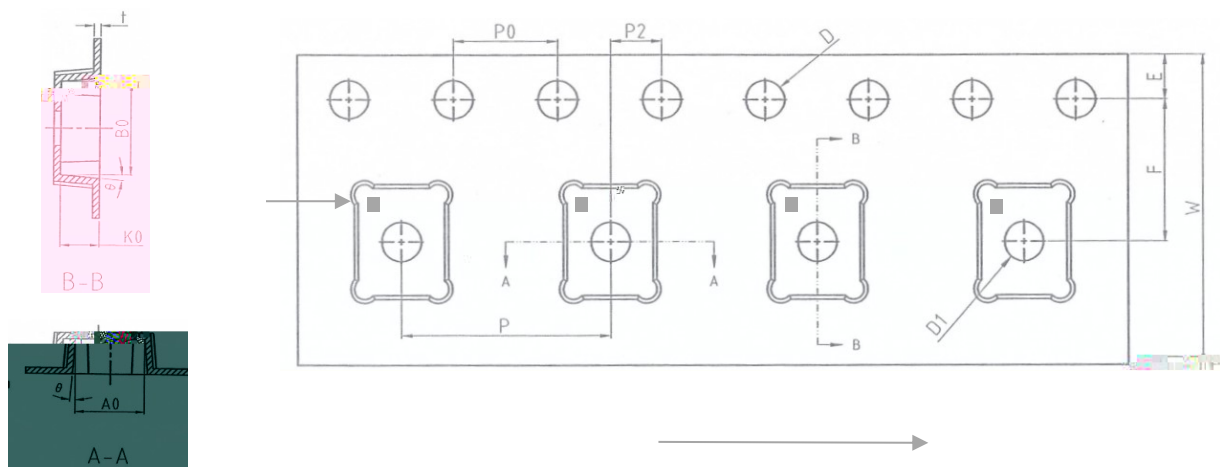




- 1) ALL DIMENSIONS ARE IN MILLIMETERS.
- 2) LEAD COPLANARITY SHALL BE 0.10 MILLIMETERS MAX.
- 3) JEDEC REFERENCE IS MO-303.
- 4) DRAWING IS NOT TO SCALE.



| SYMBOL | MILLIMETER |     |     |
|--------|------------|-----|-----|
|        | MIN        | NOM | MAX |
| A      |            |     |     |
| B      |            |     |     |
| C      |            |     |     |
| D      |            |     |     |
| t      |            |     |     |



| SYMBOL | MILLIMETER |     |     |
|--------|------------|-----|-----|
|        | MIN        | NOM | MAX |
| E      |            |     |     |
| F      |            |     |     |
| P2     |            |     |     |
| D      |            |     |     |
| D1     |            |     |     |
| P0     |            |     |     |
| 10P0   |            |     |     |
| W      |            |     |     |
| P      |            |     |     |
| A0     |            |     |     |
| B0     |            |     |     |
| K0     |            |     |     |
| t      |            |     |     |
| θ      |            |     |     |