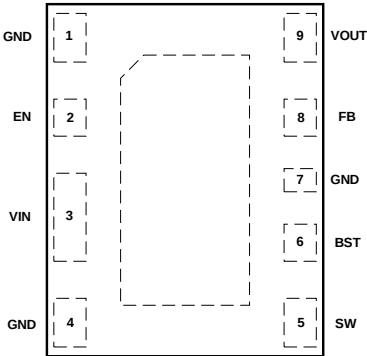


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ORDERABLE DEVICE	PACKAGING TYPE	STANDARD PACK QTY	PINS	PACKAGE DESCRIPTION	MSL
& %&		)			

%			
DESCRIPTION	MIN	MAX	UNIT
%	% &)	(& ((& (	
&	())	% %&)	



%

&

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NAME	NO.	PIN FUNCTION
	&	
	)	
		%

PARAMETER	DEFINITION	MIN	MAX	UNIT
		()	(	
		(	%&)	

PARAMETER	DEFINITION	MIN	MAX	UNIT
	%	&	&	
	& %	%	%	

%)
& %&)

PARAMETER	THERMAL METRIC	ECLGA3X3.8-9L	UNIT
	%	(	
	%	%&	
	%	%	
	%	& &	
	%	%	

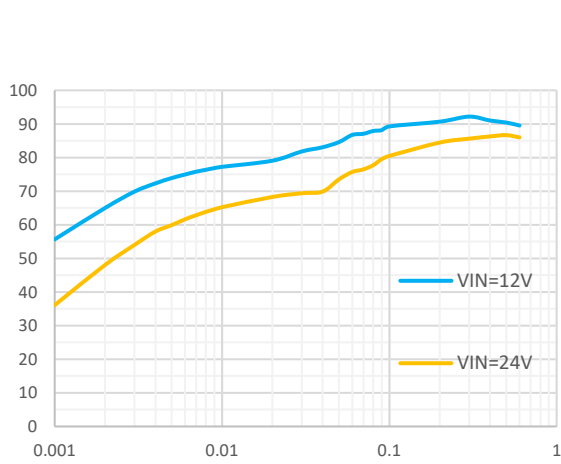
%) % () %

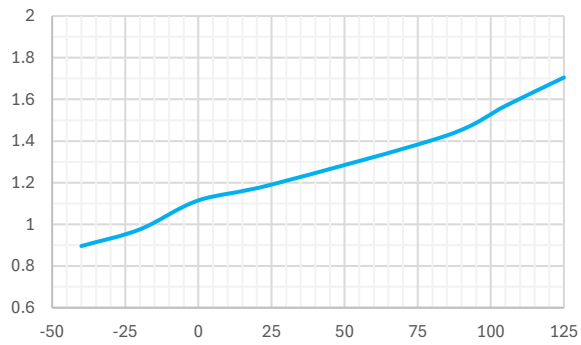
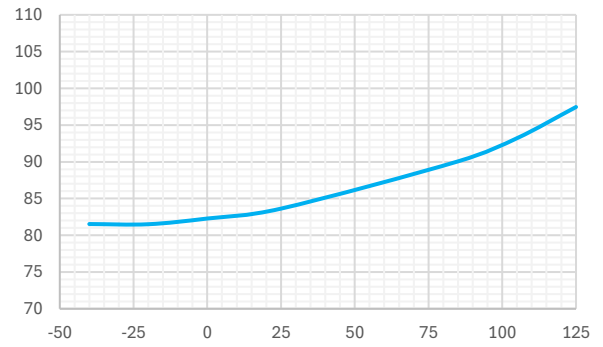
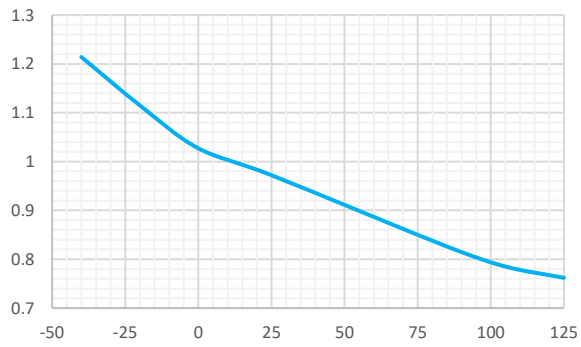
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SYMBOL	PARAMETER	TEST CONDITION	MIN	TYP	MAX	UNIT
Power Supply and Output						
			()		(	
				(		
				((		
		%&		%	)	
		%&				
Enable						
				%&%	%&	
				%&		
Feedback and Error Amplifier						
		&)			&)	
Current Limit						
			%&	%&	%)	
		&)		%	%&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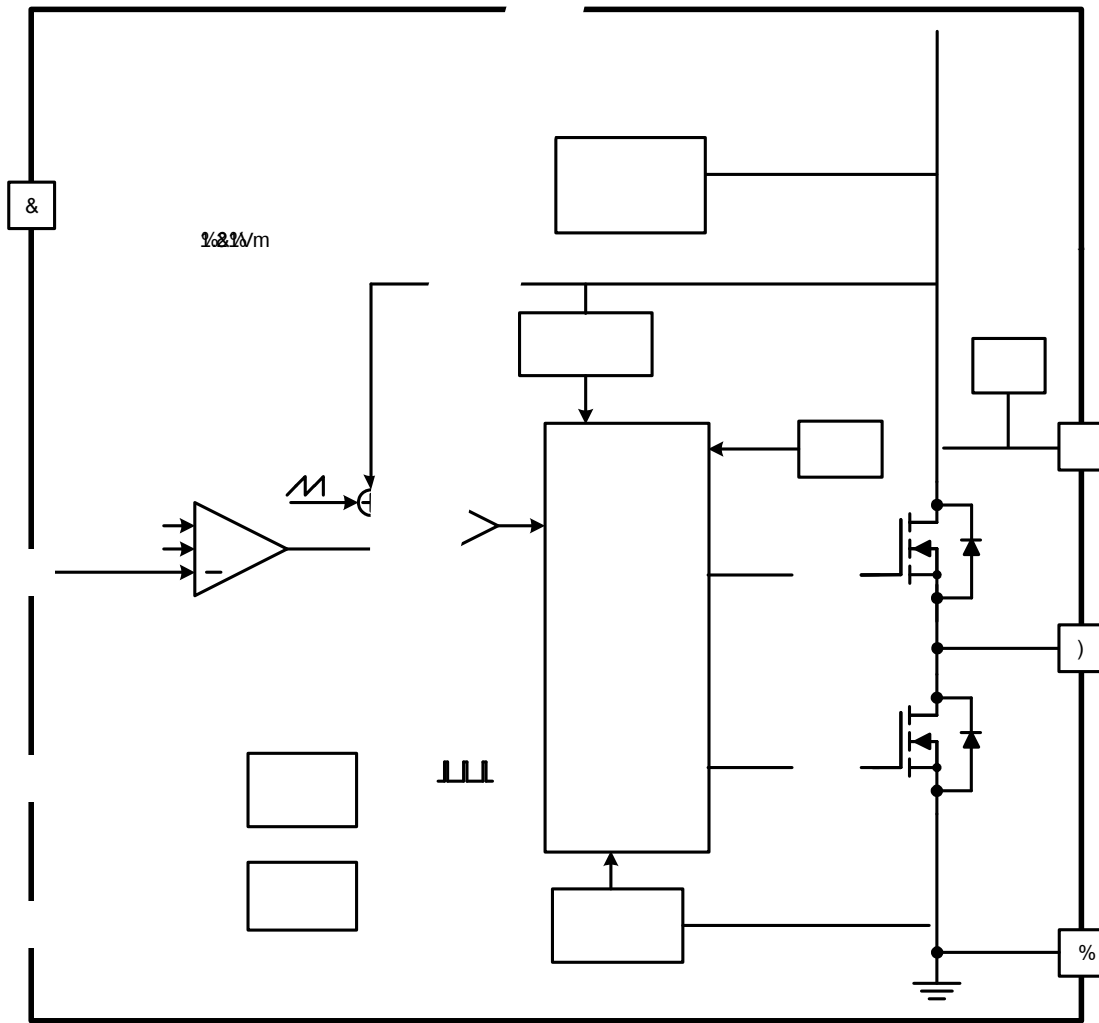
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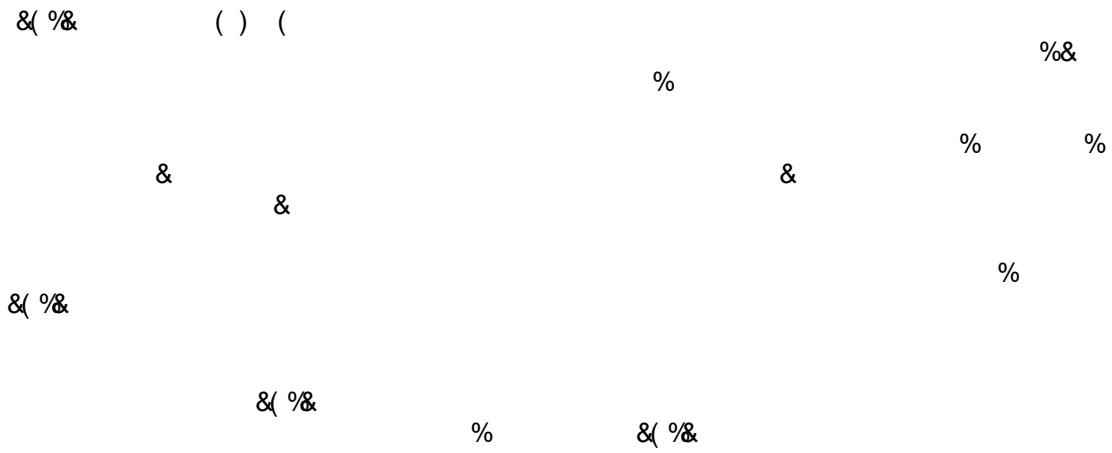
& %&



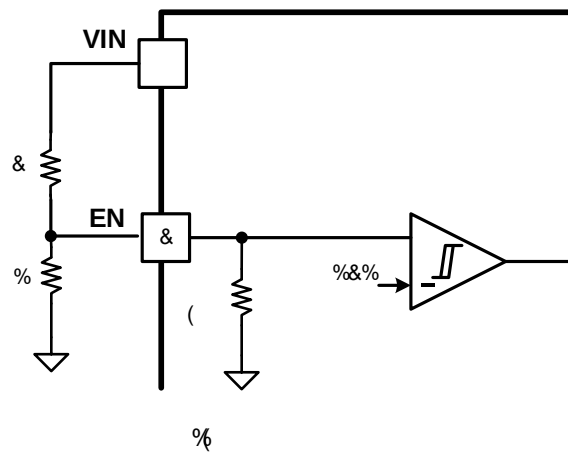
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Overview



Peak Current Mode Control and Pulse Skipping Mode



Output Voltage

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-

Peak Current Limit

$I_{PK} \approx 1.5 \times I_{RMS}$

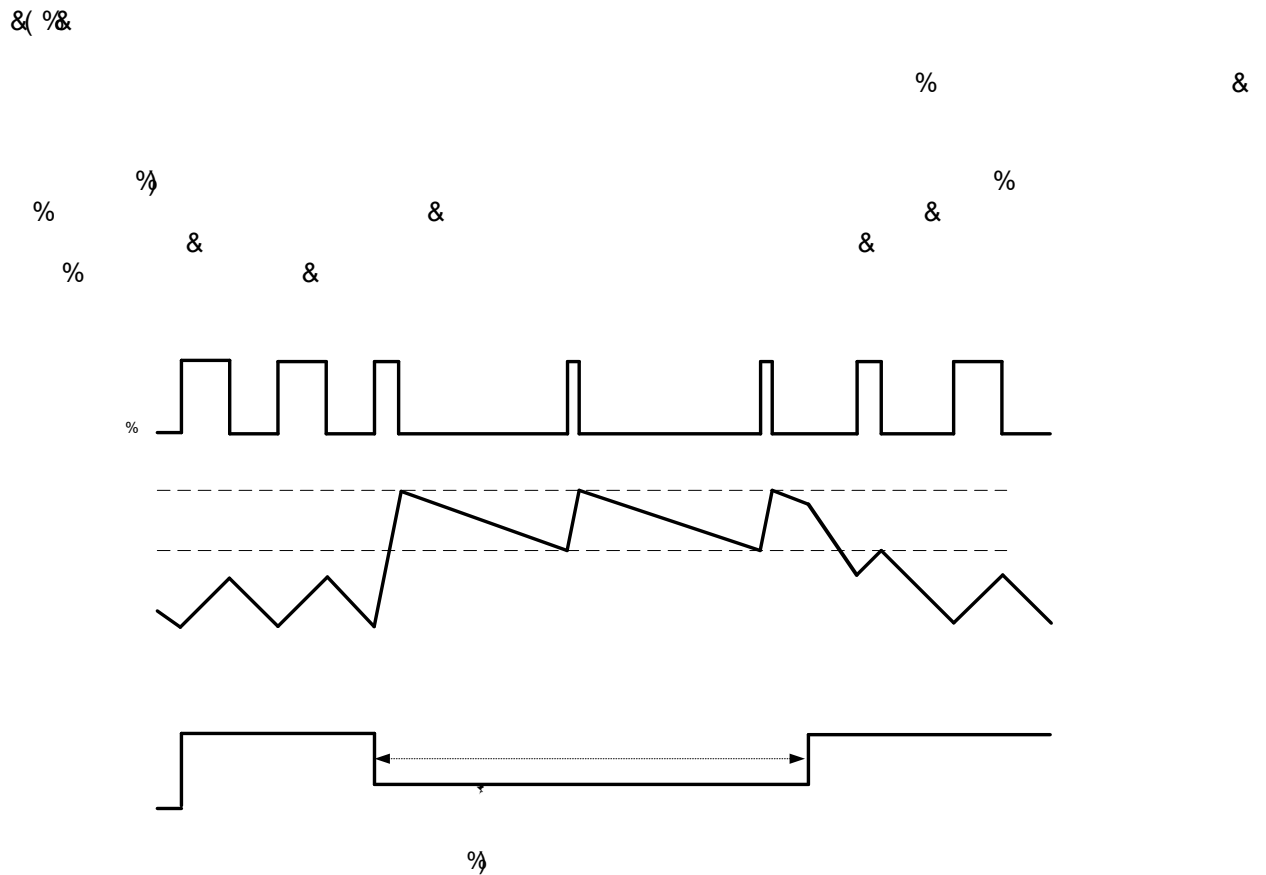
Bootstrap Voltage Regulator

$V_{BS} = V_{DD} - V_{DS}$

Internal Soft-Start

$I_{SS} \approx 1.5 \times I_{RMS}$

Over Current Protection



Over voltage Protection

& %&

%%

%)

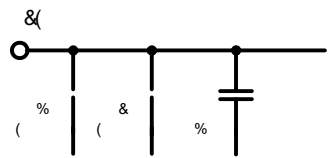
Thermal Shutdown

& %&

% °
%) °

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Typical Application



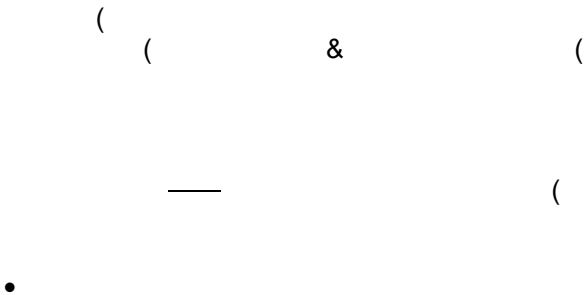
% & ()

Design Parameters

Design Parameters	Example Value
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	%&
	))
	)

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Output Voltage



V _{OUT}	R ₃	R ₄
%	&(	&
&)	(& &	&
	&	&
)	%)	&
%&	&	&

Under Voltage Lock-Out

& %

() %

Bootstrap Capacitor Selection

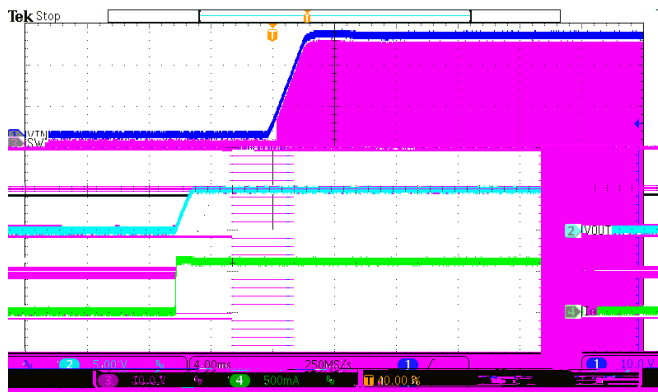
%) %

Output Capacitor Selection

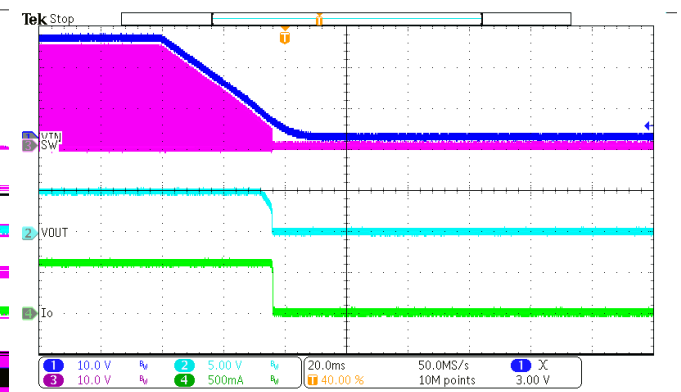
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Application Waveforms

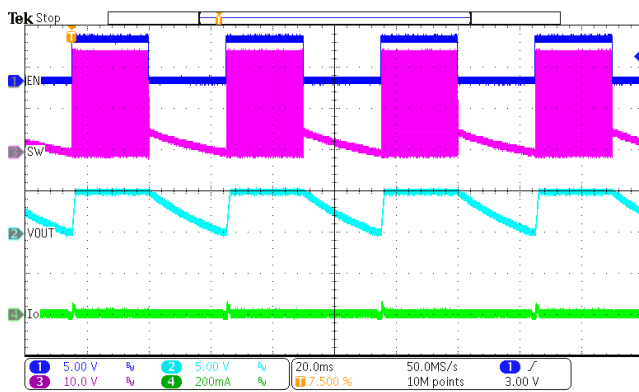
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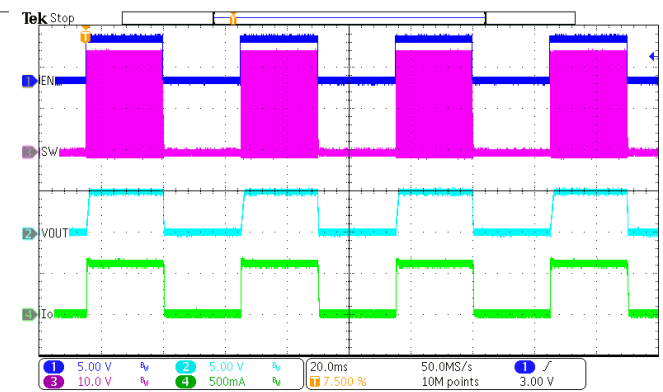


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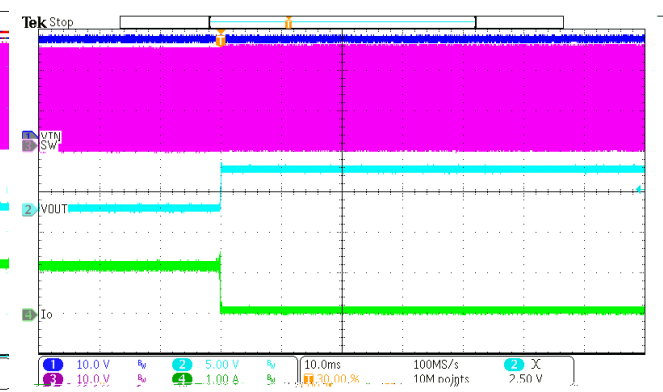


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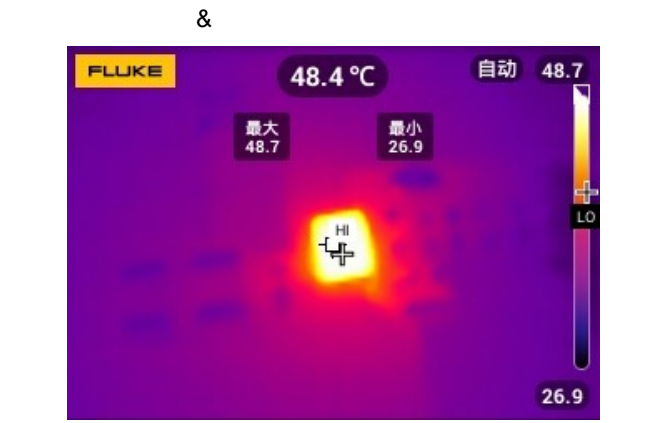
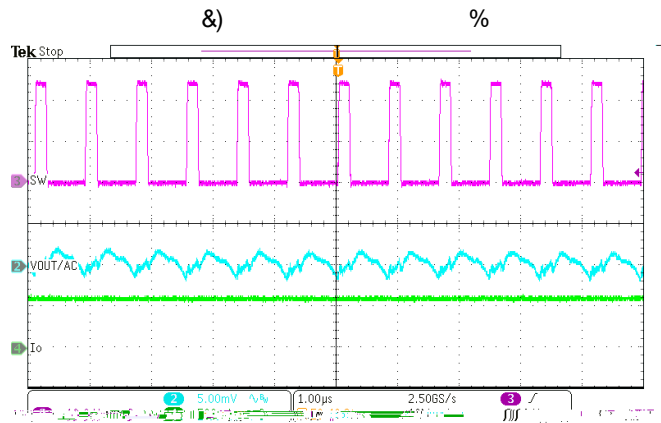
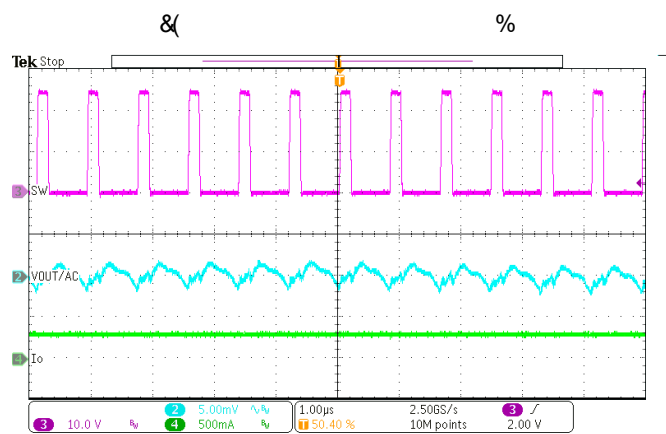
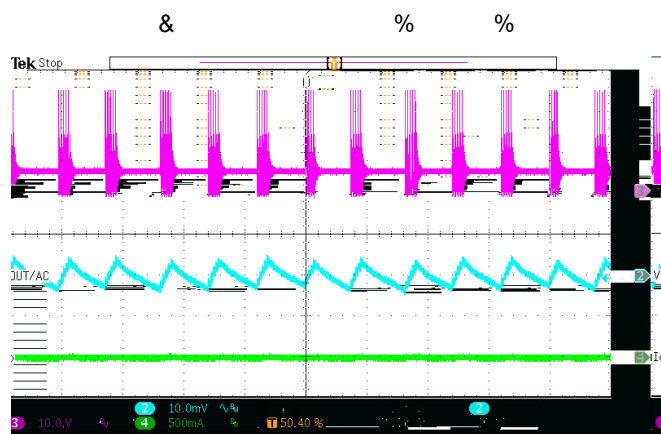
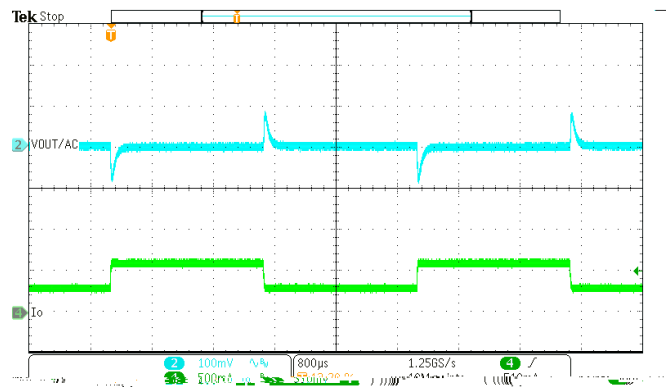
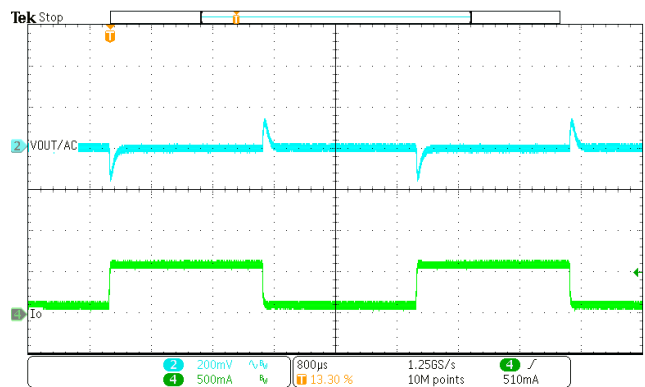


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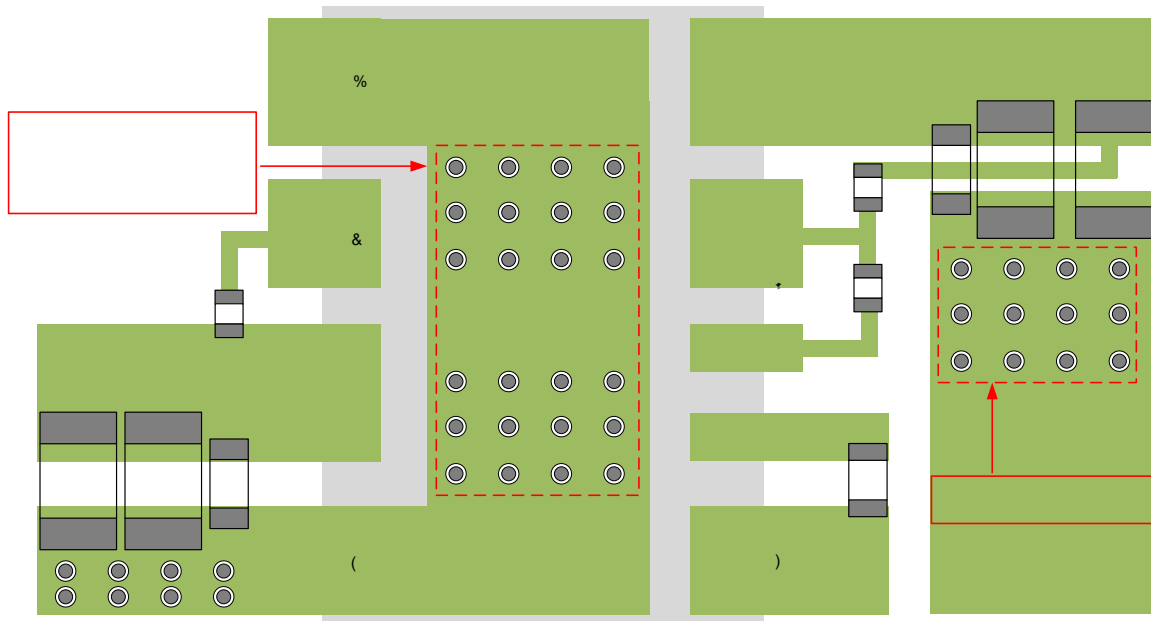
Application Waveforms



Layout Guideline

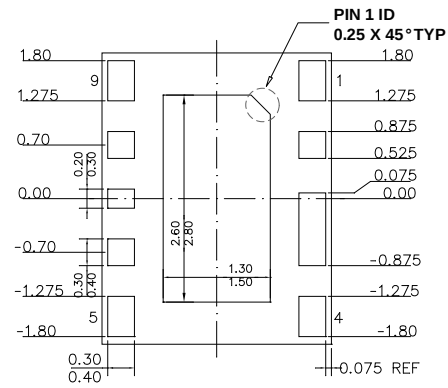
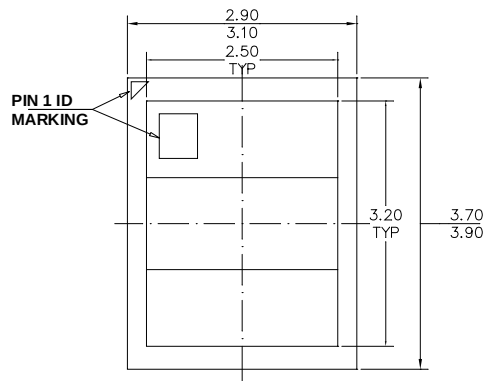
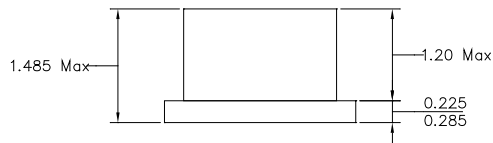
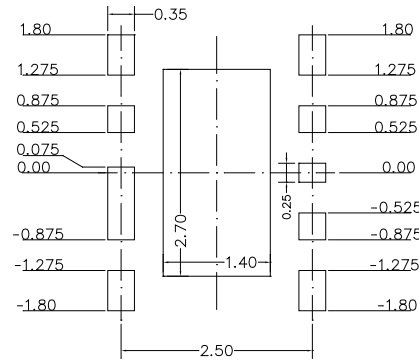
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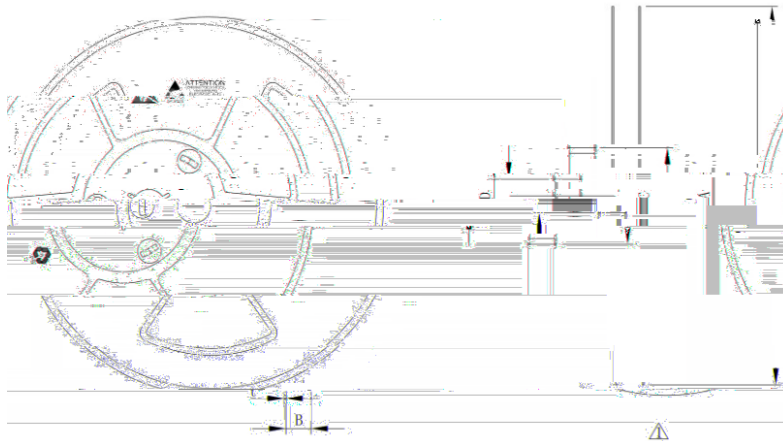


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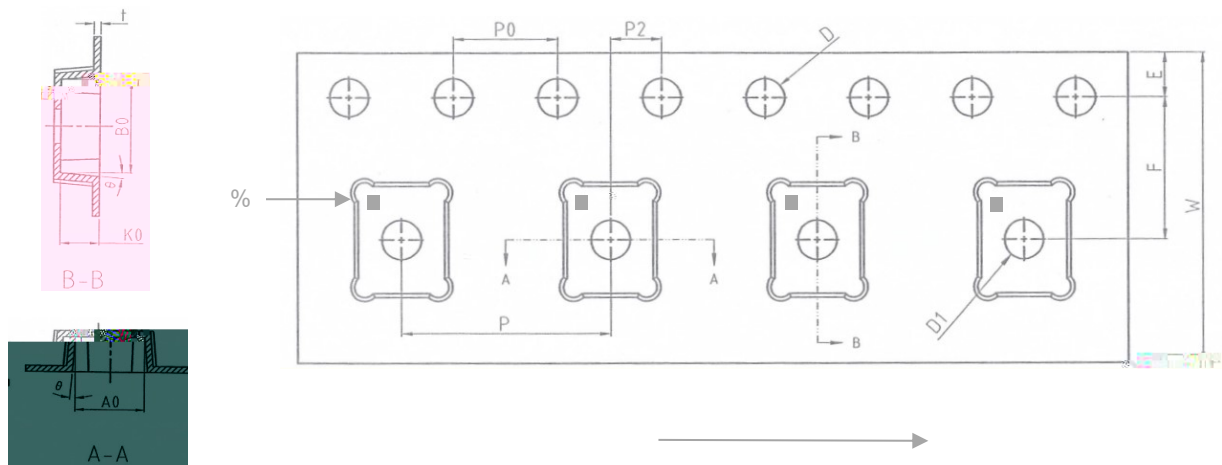
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**LMSRBT****L L SRBT****PFAB SRBT****OB L BKABA I KAM BOK****KL B**

- 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	&		(
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