

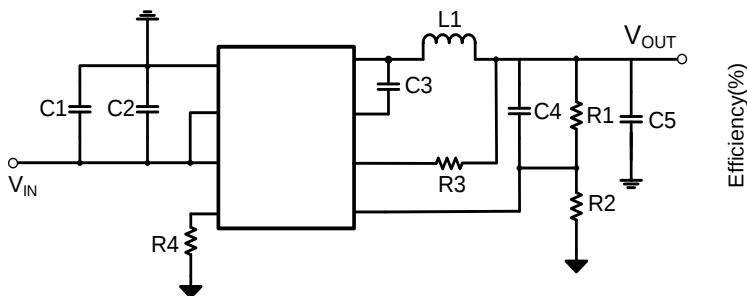
4.4V-80V Vin, 2A, High Efficiency Synchronous Step-down DCDC Converter

FEATURES

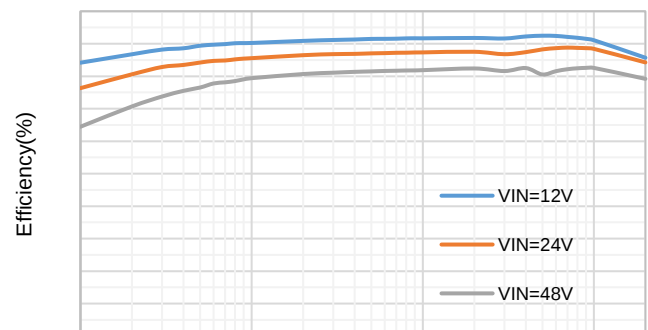
DESCRIPTION

APPLICATIONS

TYPICAL APPLICATION



4.4V-80V, Synchronous Buck Converter



Output Current(A)

Efficiency, $F_{SW}=400kHz$, $V_{OUT}=5V$

REVISION HISTORY

DEVICE ORDER INFORMATION

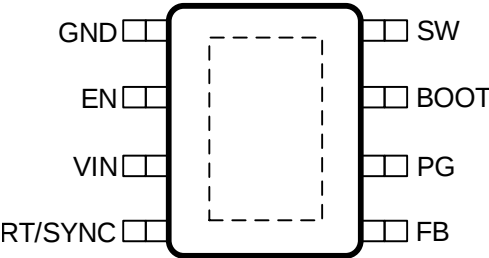
2 5 '(5 \$ % / (' (9 , & (	3 \$ & . \$ * , 1 * 7 < 3 (	6 7 \$ 1 ' \$ 5 ' 3 \$ & . 4 7 <	3 \$ & . \$ * (0 \$ 5 . , 1 *	3 , 1 6	3 \$ & . \$ * (' (6 & 5 , 3 7 , 2 1	0 6 /

ABSOLUTE MAXIMUM RATINGS

' (6 & 5 , 3 7 , 2 1	0 , 1	0 \$;	8 1 , 7

- (1)
- (2)
- (3)
- (4)

PIN CONFIGURATION



) L J X U H / H D G 3 0 P 0 2 1 L F

PIN FUNCTIONS

1 \$ 0 (	1 2	3 , 1) 8 1 & 7 , 2 1

RECOMMENDED OPERATING CONDITIONS

3\$5\$0(7(5	'(), 1, 7, 2 1	0, 1	0\$;	8 1, 7

ESD RATINGS

3\$5\$0(7(5	'(), 1, 7, 2 1	0, 1	0\$;	8 1, 7

THERMAL INFORMATION

3\$5\$0(7(5	7 + (5 0\$ / 0 (7 5, &	(6 2 3 /	8 1, 7

ELECTRICAL CHARACTERISTICS

6<0%2/	3\$5\$0(7(5	7(67 & 21',7,21	0,1 7<3 0\$;	81,7
3RZHU 6XSSO\				
3RZH026)(7V				
5HIHUHQFH				
&XUUHQW QLP 2WHU &XUUHQW 3URWHFWLRQ				

6 < 0 % 2 /	3 \$ 5 \$ 0 (7 (5	7 (6 7 & 2 1 ' , 7 , 2 1	0 , 1 7 < 3 0 \$;	8 1 , 7

FUNCTIONAL BLOCK DIAGRAM

OPERATION

2YHUYLHZ

(QDEOH8DQCOROWDRJHNRXWUHVKROG

6ZLWFKUQTJXHQF\ DQG &ORFN 6\QFKURQLJDWLRQ



/RZ' URBXWXQFWLRQ

0LQLPXP 2Q 7LPH)XQFWLRQ

2YH&XUUHIQWLW -LQEXRGH

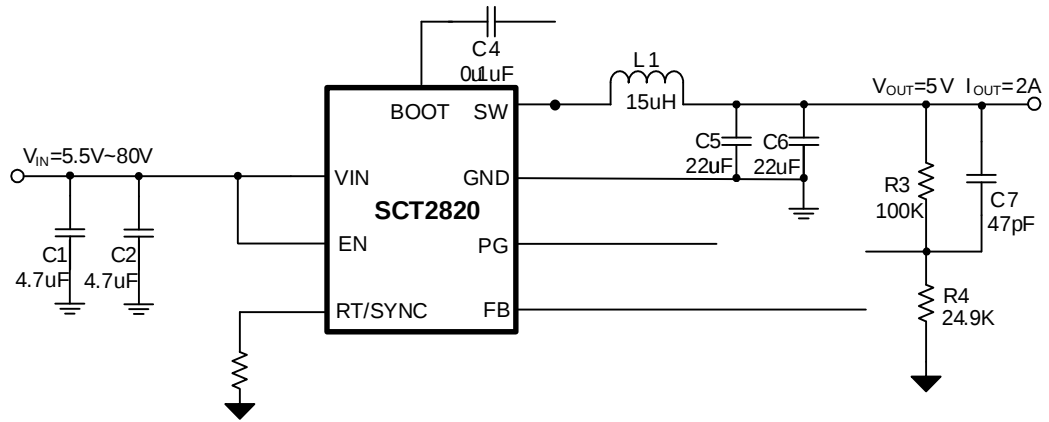
2YHU YROUW H F3WLRQ

3RZHUR G

7KHUPDO 6KXWGRZQ

APPLICATION INFORMATION

7\SLFDO \$SSOLFDWLRQ



)LJXUH6&7 'HVLJQ ([DP9QXWSXW

'HVLJQ 3DUDPHWHUV

'HVLJQ 3DUDPHWHUV	([DP SOH 9DOXH

2XWSXW 9ROWDJH

)

9 ₂₈₇	5	5

6ZLWFKLQJ)UHTXHQF\

,) ,

)VZ	5 5 ₆ :

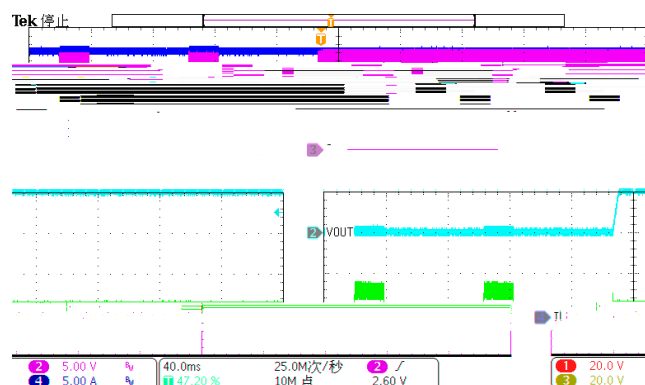
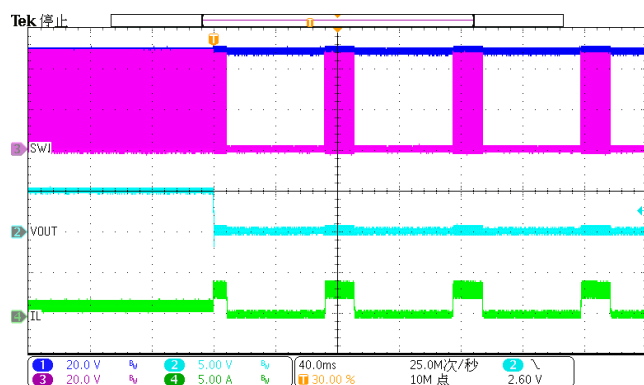
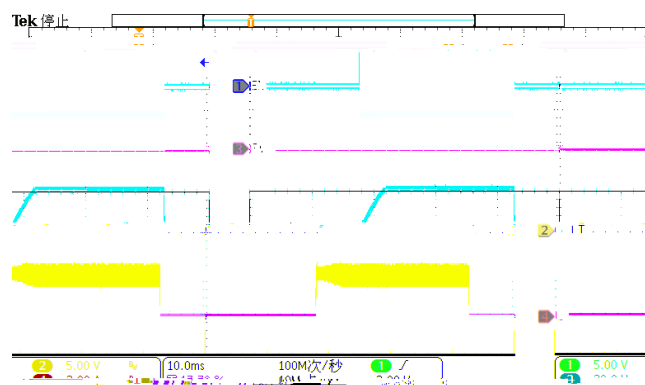
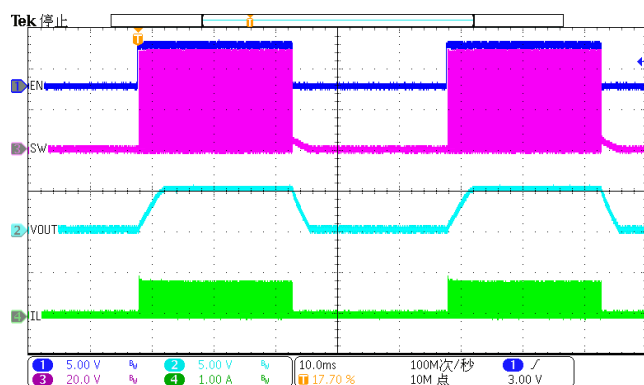
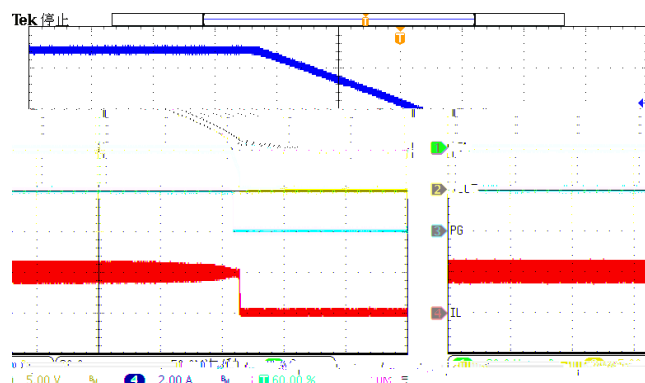
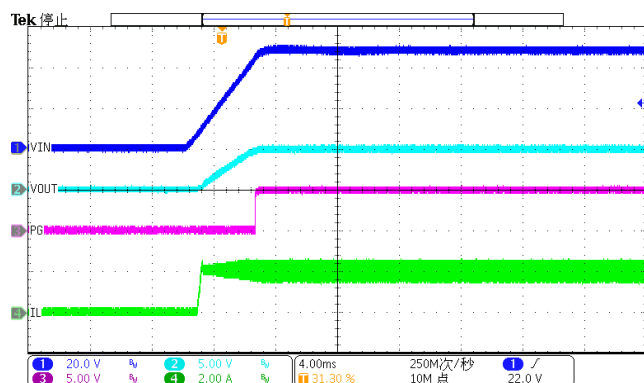
,QGXFWRU 6HOHFWLRQ

%RRWVWUDS &DSDFLWRU 6HOHFWLRQ

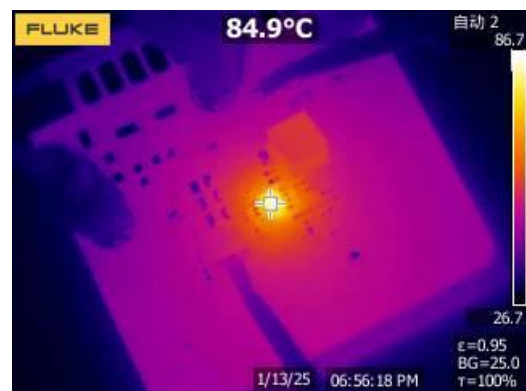
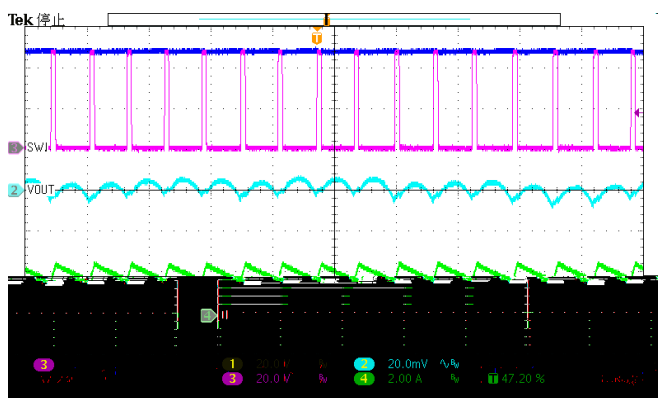
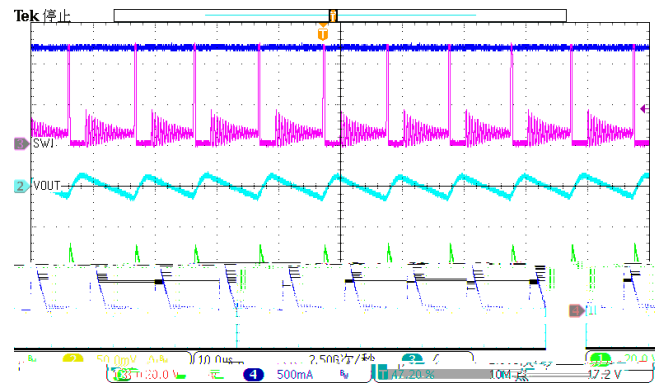
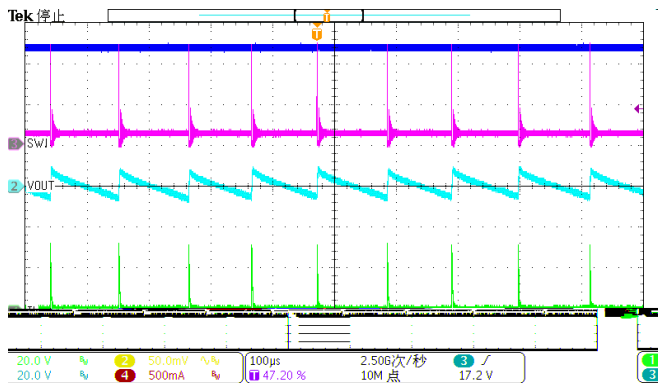
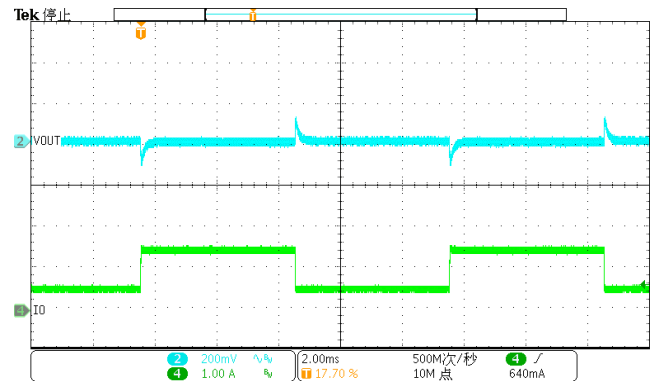
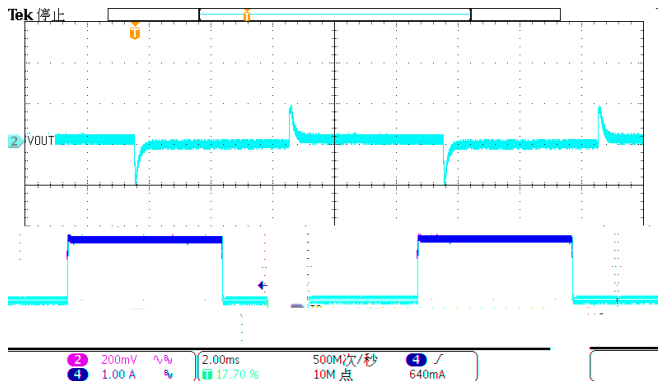
2XWSXW &DSDFLWRU 6HOHFWLRQ

7DEOH\SLFDO ([WHUQDO &RPSRQH QW 9DOXH V

\$SSOLFDWLRQ :DYHIRUPV



\$SSOLFDWLRQ :DYHIRUPV



/D\RXW *XLGHOLQH

1.

2.

3.

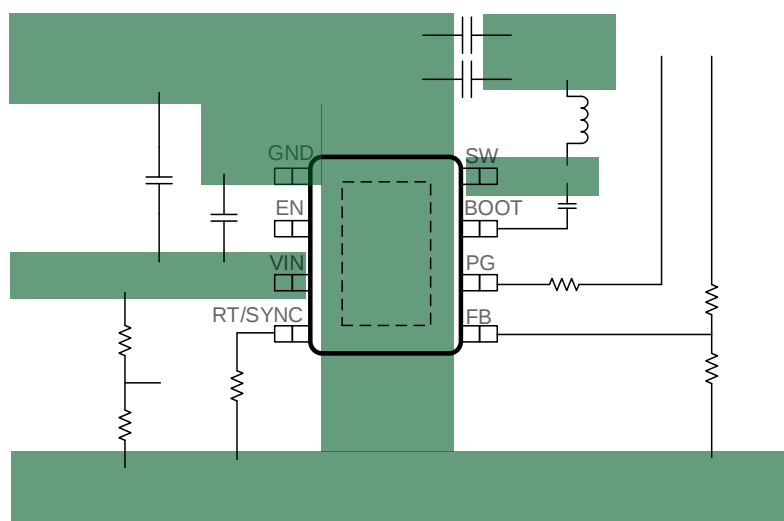
4.

5.

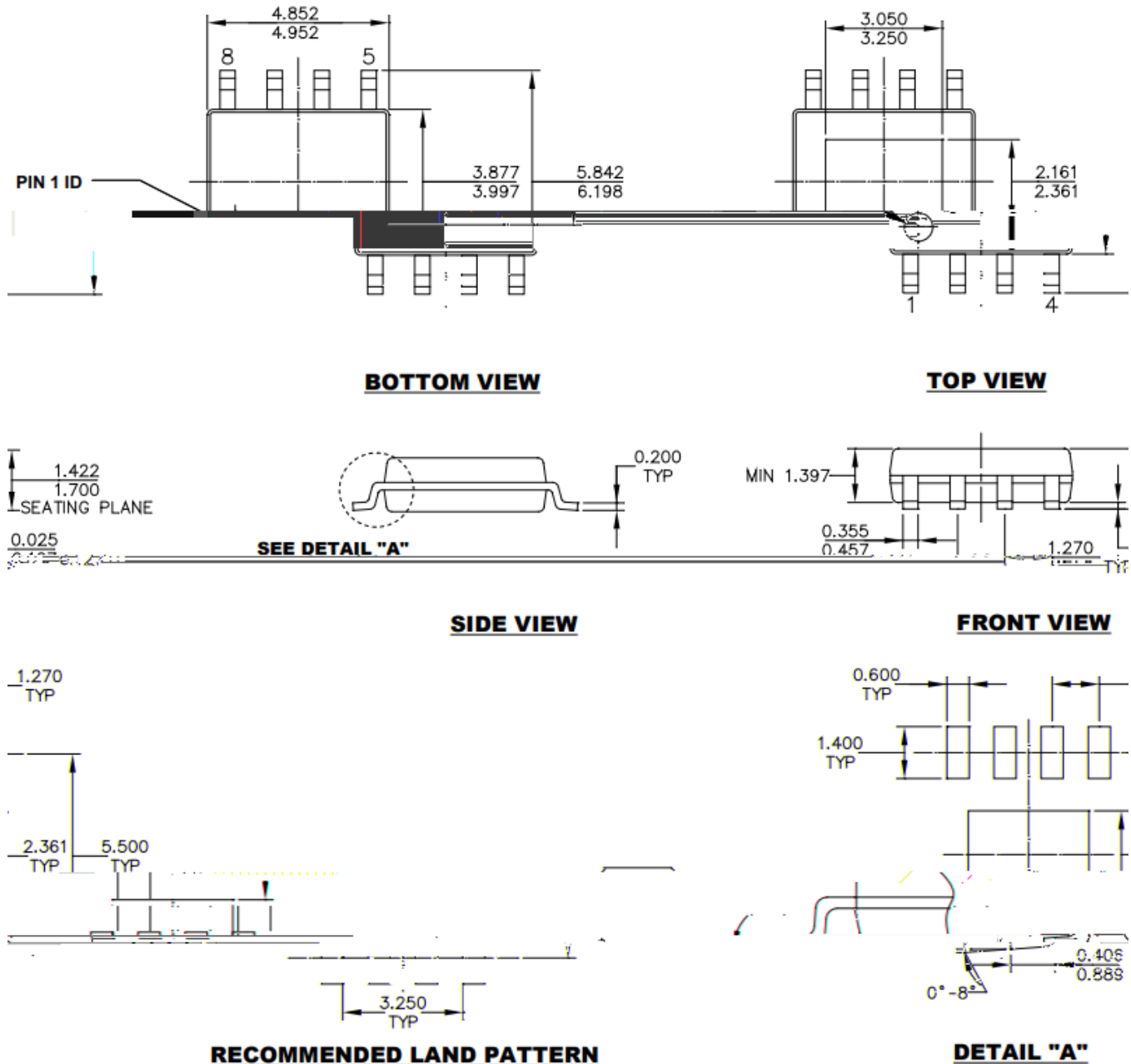
6.

7.

8.

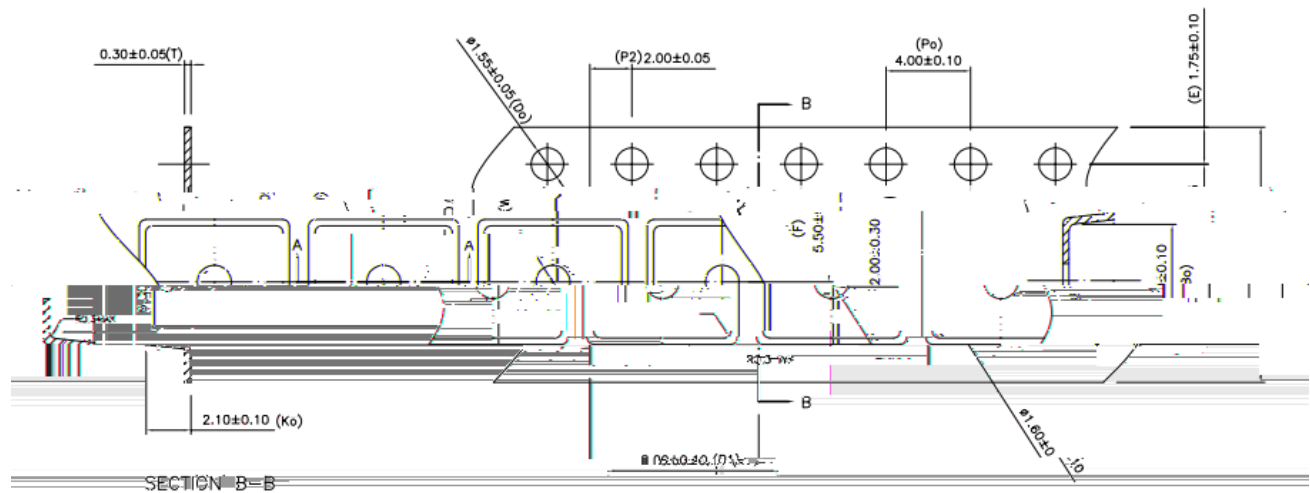


PACKAGE INFORMATION

**NOTE:**

- 1) ALL DIMENSIONS ARE IN MILLIMETERS.
- 2) PACKAGE LENGTH DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURR.
- 3) PACKAGE WIDTH DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSIONS.
- 4) LEAD COPLANARITY (BOTTOM OF LEADS AFTER FORMING) SHALL BE 0.1 MILLIMETER.
- 5) DRAWING REFERENCE TO JEDEC MS-012, VARIATION AA.
- 6) DRAWING IS NOT TO SCALE.

TAPE AND REEL INFORMATION



NOTES:

1. 10 sprocket hole pitch cumulative tolerance ± 0.2

2. Camber not to exceed 1mm in 100mm.

3. Material: Black conductive Polystyrene.

4. Ao and Bo measured on a plane 0.3mm above the bottom of the

pocket.

5. Ko measured from a plane on the inside bottom of the pocket

to the top surface of the carrier.

6. Pocket position relative to sprocket hole measured as true position

of pocket not sprocket hole.

7. Pocket center and sprocket hole center must be same position.