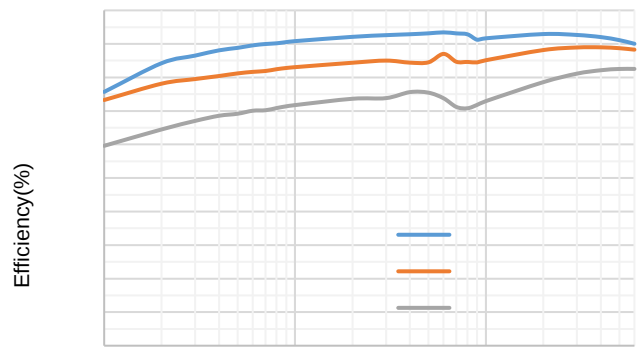

ELECTRICAL CHARACTERISTICS

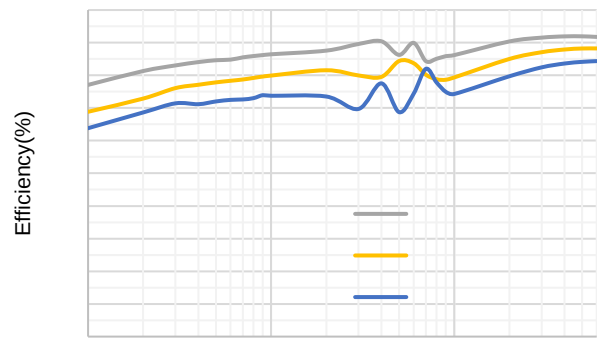
9,1	9 7-	f & a	f &	W\SLFDO YDOXH LV WHVWHG XQGHU	f &

9,1

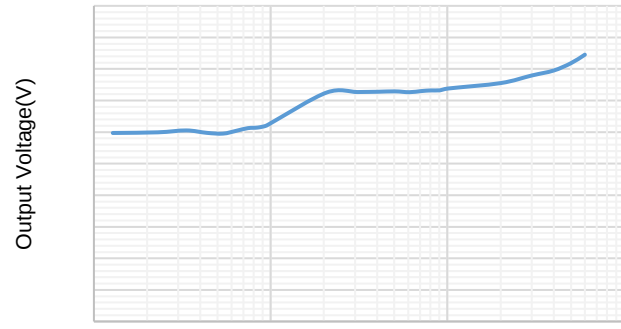
TYPICAL CHARACTERISTICS



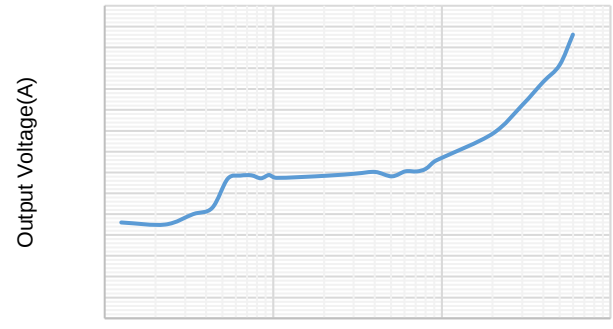
Efficiency (%)
Iout(A)
)LJXUH(IILFLHQF\ YV /RDG &XUUH



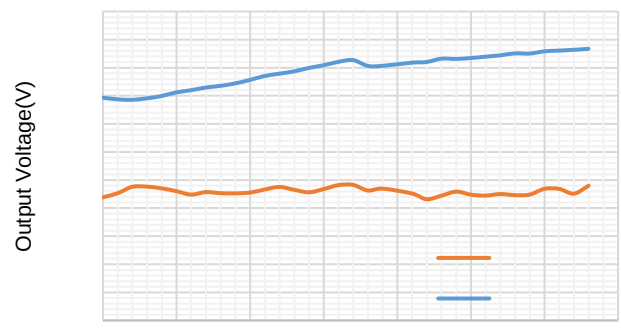
Efficiency (%)
Iout(A)
)LJXUH(IILFLHQF\ YV /RDG &XUUH



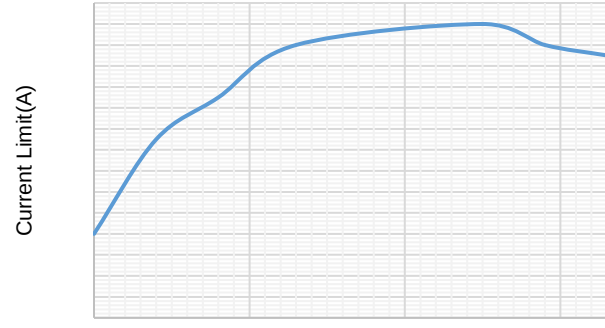
Output Voltage (V)
Iout(A)
)LJXUH/RDGHJXODWLRQ9RXW 9



Output Voltage (V)
Iout(A)
)LJXUH/RDGHJXODWLRQ9RXW 9

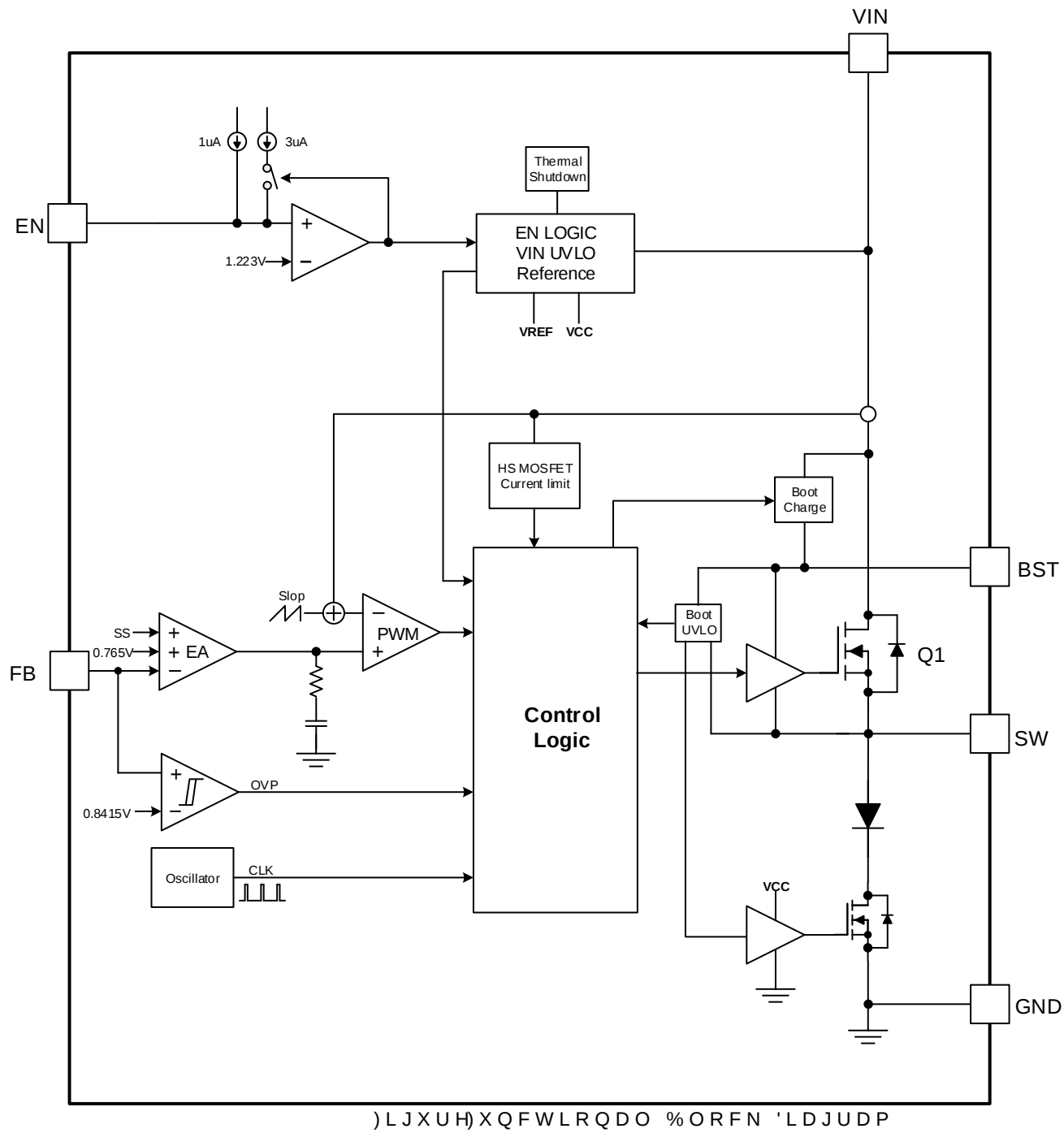


Output Voltage (V)
)LJXUH/LQH 5HJXODWLRQ



Current Limit (A)
Temperature (°C)
)LJXUH6 &XUUHQW /LPLW 96 7H

FUNCTIONAL BLOCK DIAGRAM



)LJXUH)XQFWLRQDO %ORFN 'LDJUDP

OPERATION

7KH&7 4LV D 9 LQSWXW \$ RXWSXW EXFN FRQPHUWHUQ ZLWKH ISQVHUU
026)(7 ,W LPSOHPHQWV FRQVWDQW IUHTXHQF\ SHDN FXUUHQW PRGH FR
H[FHODQHWWQDQ ORDG WUDQVLHQW UHVSQVH

7KH&7 4IHDWXUHV IHHGZLWFKLQJ IUHTXHQF\ ZKLFK PLQLPLJHV WKH
FRPSRQHQWV VLJMWQDQDQW&7LSS4DHDWKHHV DQVLQWMDQDQWLPW WR
ODUJH LQUXVK FXUUHQW DQG RXWSXW YROWDJH RYHUVKRRW GXULQJ VW
SUEILDVHG RXWSXW FRQGLWLRQDQWHLWHQDQEHWWZFRQH3:0 PRGH DQG 360 PR
KLJKLHILHQF\ RYHU ZLGH ORDG FXUUHQW SLQDQXQDQHTXLRVDRQV RXUVDQ
FRQGLWLRQ WR DFKLHYH KLJK HILFLHQF\ DW OLJKW ORDG

7KH&7 4KDV D GHIDXOWSLQDQDQWZLWK9 K\VVWHUHVLV 7KH (YRSDQDQD
SLQ ZLWK D SUHFLVLRQ WKUHDQDQWQDQW EDQXEHYRQDQW ORFNRXW V

SRZKIS DQG SRZHQUDSSOLFDFWILRQ RW WKH IKLJK VLGH 026))(7 VWDUWV WR DS
:LWKRXW /'2 RSHUDWLRQ PRGH EH\RQG WKLV SRLQW WKH VZLWFKLQJ PD\
RXW RI UHJXODWLRQSUREDEHPLW 4VH2 PRGH DXWRPDWLFDOO\ UHGXFHV WKH
WR LQFUHDVH WKH HIIHFWLYH GXW\ F\FOH DQG PDLQWDLQ UHJXODWLRQ

7KH&7 4LPSOHPHQWUHQW SURWOGVEIDFQ ZLWK&QW OIEFLOHFVROHPLW
KLJKLGH 026))(7 SHDN FXULQGXWWRUHQWLRGXQQQLQJ DZD\ GXULQRXXVSHUSGFWH
VKRUW FRQGLWLRQ

:KHQ RYK&ORDUG VKRUWFRQDSHUQWHUWKDQXRSX&URRYUDQVWGLQJ UHTXLUHF
7KHQGXFWRU\FOXDPHQV DW RYHU FXUUMKRWOLPWVGRDQVQHEZKXODRCHGDJH
ZLWK)% YROWDJHWLQVWUHQVOMKQWWDJH FRQLQXRXVO\

7KH&7 4LPSOHPHQWV IURP XNDQSRWHFW WKQCHQSMFWW&URRYXW&RWG RU
VKRUW FRQGLWLRQVZLWFKLQJ IUHTXHQFZKH BQWBLQDSXVXW&OWLDGHHG E\
DQGDVKW)% SLQ YROWDJH9IDROV9IBKPH 4XVHV D GLJLWDPQJHVRHQDEOH
VIQFKURQLJDWLRQ WR DQ H[WHUQDSDQQRFXGXWIEQDQIRUPDQVWVWUHQVQWV
LQGXFWRU FXUHQW FDQ H[FHHG WKMKSHDNLJKXUQSHQW YROWDJHVRHQVWKP
:KHQ WKH RXWSXW YROWDJH LV IRUFHG ORZ E\ WKH VKRUWHG ORDG WKH
RIWLP 7KH IURP&HQDHHFWLYHO\ LQFUHDVH EVWKHUHQDIVLQJ WKH SHULRG RI
SURYLGGLQJ PRUH WLP IRU WKH LQGXFWRU FXUHQW WR UDPS GRZQ

:LWK D PDPURHTXHQF&EDFNL R WIKHUH LV D PD[LPP IUHTXHQF\ DW ZKLFK V
EH FRQWUROOHGREAGIUDRWHQFWLRQFDQXVWDRQV WKH PD[LPP VZLWFKLQJ
WKH LQGXFWRU FXUHQW UHPDQLQVIRQ&HGWRRQWKURQHZKHQVHGRSHUDWLQ
PXVW QRW H[FHHG WKH FDOFXODWHG YDOXH

ZKHUH

/LPLWHG DYHUDJH FXUHQW

,QGX'&WUHLVWDQFH

B OD[LPP LQSXW YROWDJH

B 2XWSXW YROWDJH GXULQJ VKRUW

'LRGH YROWDJH GURS

,QWHJUDWHG KLJK VLGH)(7 RQ UHVLVWDQFH

B &RQWUROODEOH PLQLPP RQ WLP

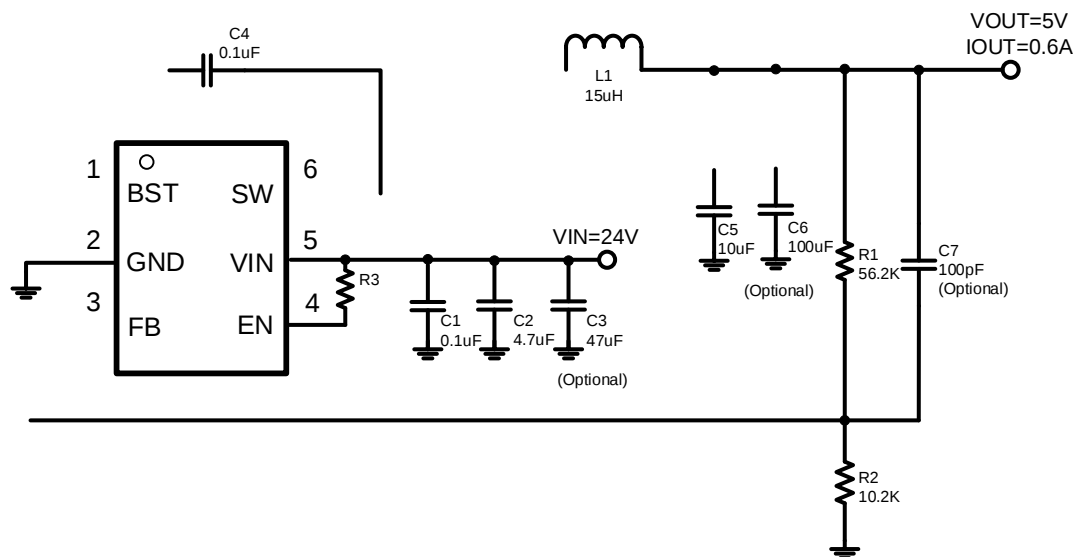
)UHTXHQF\ GLYLGH HTXDOV RU

7KH&7 4LPSOHPHQWV YROWDJHWHFWLRQUHVRPLQEXPLWH RXWSXWGYLQDQJH
ORDG WUHQVRYHUQJ IURP RXWSXWJKDQWQDQFRHQQRWHRQFRQSDUHQVU
FLUFXLWVRKSD&HSLQWRRVQWHDQDOYRUHQDSHQF)% YROWDJH RI LQWHUQDO
9 UHIHUHQFH YROWDJH 026))(7 WW&QDYRLIG RXWSXW YROWDJH FRQLQX
)% SLQ YROWDJH IDOOV EH&URZHUHQRAHWKHO WIDH6))(7 FDQXUQ RQ DJDLQ

7KH&7 4SURWHFWV WKH GHYLEH&UUPMFKHVGLPDJKHHDW DQG SRZQFHGLVV

WKHFMXQ Q WHHSHHFWUWKQW HUIQDOPDOWHRSWZHU 026)(ZLWFK:KQV KH
MXQFWLRQ WHVSHOPIZXWGHYQDH UZLWKDLQWHUSBDWRIW VWDUW

APPLICATION INFORMATION



)LJXUH6&7 4HVLJQ ([DPSS0XWSXW ZLWK 3URJUDPPDEOH 89/

,Q SXW 9ROWDJH	9 1RUPDO
2XWSXW 9ROWDJH	9
0D[LPX2FXWSXW &XUUHQW	\$
6ZLWFKLQJ)UHTXHQF\	0+]
2XWSXW YROWDJH ULSSOH	P 9
7UDQVLHQW 5HSWRQ\$HORDG	9RXW P 9
6WDUW9RQSWH ULVLQJ 9,1	9
6WRS ,Q SXW 9ROWDJH IDOO	9

7KH RXWSXW YROWDJH LV VHW E
5 DQG 5LQ W\SLFDO DSSOLFI
5HFRPPHQGHVVLVWDQFHVMTXD\
WR FDOFXODWH 5

Table 1. R_s , R_6 Value for Common Output Voltage

ZKHUH

$95_{()}$ LV WKH IHG EDFN UHIHU
9

7KH %\$) GLRGH KDMRQ M DQ BWLWDSQ FBVLQJ (TXDWKLRQ VRWDO ORWKHQ WK
PD[LPXP LQSXW YROWDJH LV

,I WKH SRZHU VXSSO\ VSHQGV D VLJQLILFDQW DPRXQW RI WLPH DW OLJK
GLRGH ZKLFK KDV D ORZ OHDNDJH FXUUHQW DQG VOLJKWO\ KLJKHU IRUZD

7KH LQSXW FXUUHQW RFRPH HUWHU LV GLVFRLOMTXBXHV DWKDISDHFWRU W
\$& FXUUHQWVFRZQK'EFQYHUWHU ZKLOH PDLQWDLQLQJ WKHZLWKQCSXW(8RC
IRUVESSHUWIRUPHQHPLF FDSDFLWRUV ZLWK D UHRXV X500LIEVXUWVWVWG WKHLU
(65 DQG VPDOO WHPSHUDQXUW ERHWLFRQOMVUHFRPPHQGHG WR XVH DQRV
X)ZLWKQVDSDFNDJH VLJH KLJK WHTXQV FUVZBQVWKQJ VPDLOH VLJH FDS
FORW1 DQG *1VSLQSRVVLEOH

7KH YROWDJH UDWLQJ RI WKH LQSXW FDSDFLWRU PXSQGEW FDSDFLWRU WPD
DOVR KDYH D ULSSOH FXUUHQW UDWLQJ JUHDWHU 5000UWKEWVWVWG WKHLU
FDSDFLWRU EH FDOFXODWVWVWG WKHLU

7KH ZRUVWFRQVHWRQ ,RFXUVZDWHU

)RU VLPSOLILFDWLQJ FKRRVH DQ LQSXW FDSDFLWRU ZLWK DQ 506 FXU
FXUUHQW

:KHQ VHOHHWDEUF FDSVFWRGV WRHFREDELOXW Rylz D'ofDSDFLWRU GHFUH
ELDYROWDFURVV D FDSDEQWRE 10000V1+Ü 'a"âz io &84- `HUD 0 1#" DSD DXU

7KH LQSXW FDSDFLWDQFH YDOXH GHWHUPLQHV WKH LQSXW ULSSOH YRO
FDOFXODWHG XVLQJ FDSDFLWRU LQSXW YROWDJH ULSSOH RFFXUV DW G

LB iCiO @eí 7Y TMQ'V
MR

FDSDFLWRUUDENH FD)SDFLWMDPLF FDSDFLWRUV WKH FDSDFLWDQFH GRF
VLPSOLILFDWLRQ WKH RXWSXW YROWDJH GHSSOHGFDQ EH HVWLDPDWHG E\

:KHUH

û LV WKH RXWSXW YROWDJH ULSSOH

6: LV WKH ZLWFKLQJ IUHTXHQF\

/LV WKH XFWWDQFH RI LQGXFWRU

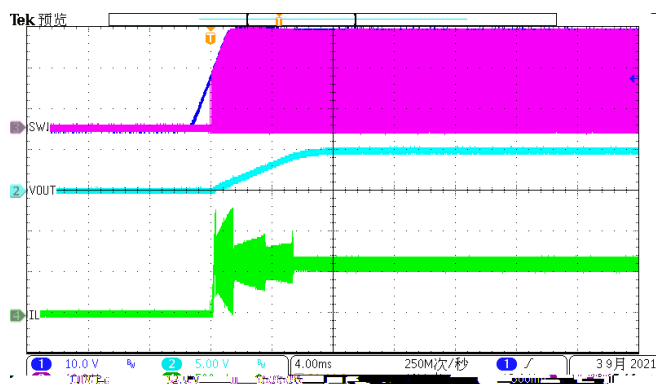
&₂₈₇ LV WKH RXWSXW FDSDFLWDQFH

9₂₈₇ LV WKH RXWSXW YROWDJH

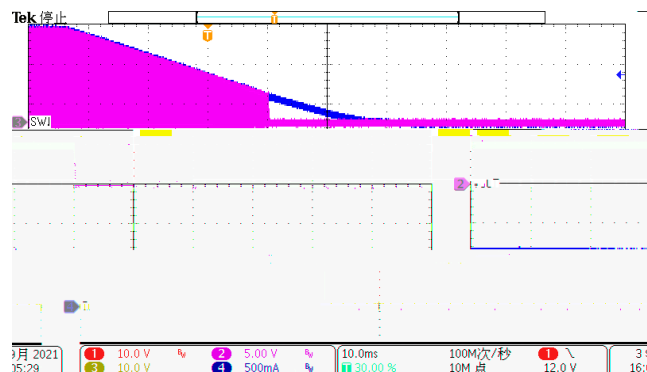
9₁ LV WKH LQSWXW YROWDJH

'XH WBSDFLWRUUDENH ' & ELDWRUUDENH LQILFDQWO\ UHGXFH FDSDFLWDQFH
FDSDFLWRUUDENH WKHLUUDENH LQILFDQWO\ UHGXFH FDSDFLWDQFH
HQVXUH DGHTXDWH HIIHFWLQJ FDSDFLWDQFH RXWSXW FDSDFLWRUV ZRUN

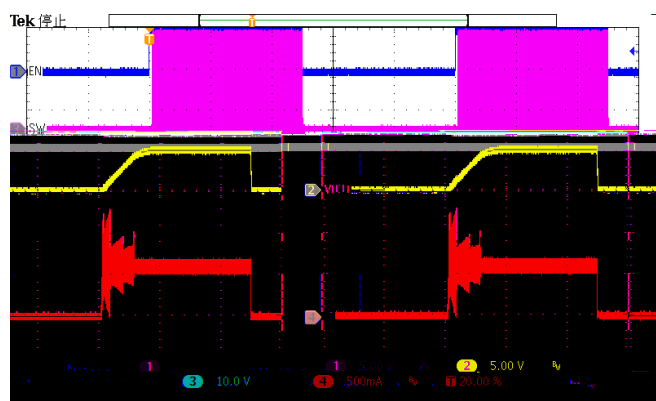
9LQ 9 9RXWXQOHVV RWKHUZZLVH QRWHG



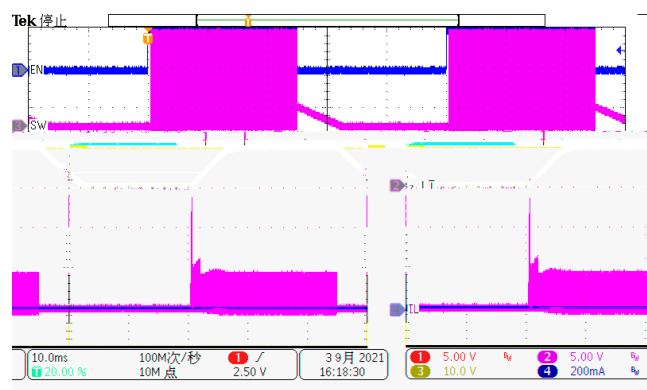
)LJXUH3RZHU XS ,ORDG



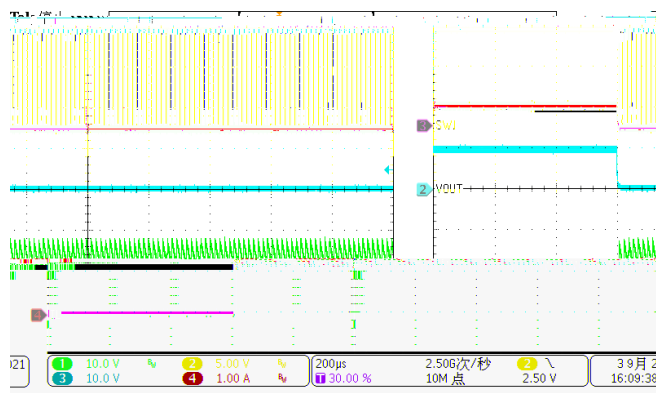
)LJXUH3RZHU GRZQ\$ORDG



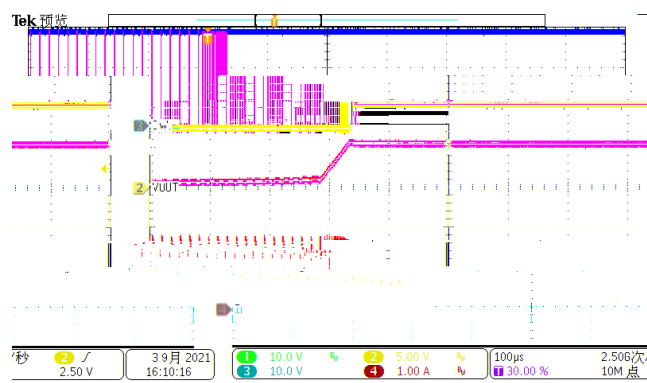
)LJXUH(1 WRJJOH \$ORDG



)LJXUH(1 WRJJOH P,\$ORDG



)LJXUH2YHU &XUUHQV\$ 3URRWDUWLV



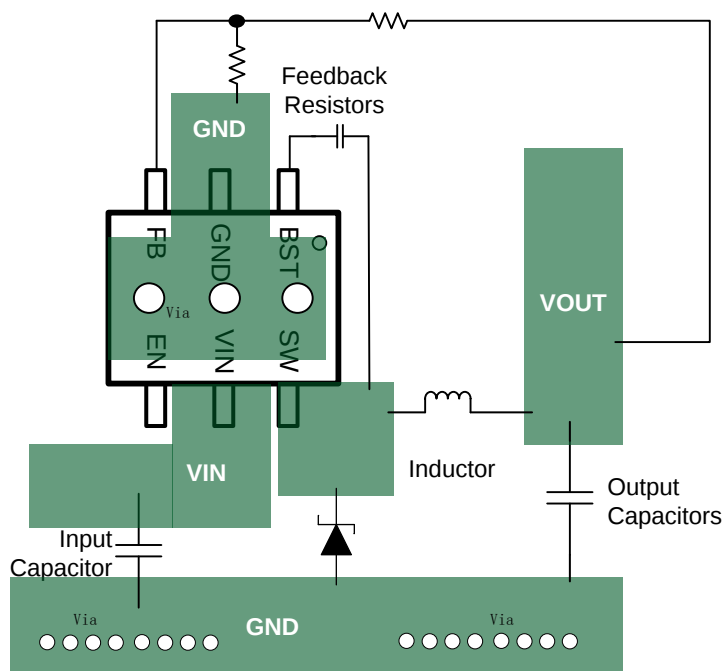
)LJXUH2YHU &XUUHQW 5HOHDS\$VH

)RU PRUH LQ [ZRUODWLQJ](#) QWHQW 6EERQ &RQHQW 7H\$QRSLKWR
3URGXFW)ROGHU /LQNV



7KH UHJXODWRU FRXOG VXIIHU IURP LQVWDELOLW\ DQG QRLVH SUREOHP
IUHTXHQF\ QRLVH LQGXFHV (0, VRI

1. 0LQLPLJH WKH OHQJWK DQG DUHD RI DOO WUDFHV FRQQHFWHG WR WKH
VZLWFKLQJ UHJXODWRU WR PLQLPLJH FRXSOLQJ
2. 7KH LQSXW FDSDFLWRU QHHGV WR EH YHU\ FORVH WR WKH 9,30SLQ HDQG
D ORZ (65 FHUPLF FDSDFLWRU DQG WKH FORVH WR SRVVLEOH WR UHGXFH
3. 2XWSXW LQGXFWRU FORXGWHWSKHSLQ 7KH DUHD RI WKH 3&% FRQ
H[FHVVLVH FDSDFLWLVH FRXSOLQJ
4. 89/2 DGMXVW DQG 57 UHVLVWRUV ORRS FRPSHQVDWLRQ DQG OHVGEOD
JURXQG ZKLFK PXVW SURXQ WKH VWHQ LQWHUOHDLQJ ZLWK SRZHU JUR
5. 5RXWH %227 FDSDFLWRU WUDFH RQ WKH RWKHU OD\HU WKDQ WRS OD\H
6. 7KH OD\RXW QHHGV EH GRQH ZLWK ZHOORQVLGHUDWLRQ RI WKH WKH
WKHUPDO YLDV LV XVHG WR LPSURYH WKH WKHUPDO GLVVLSDWLRQ 7K
WKH WRS OD\HU JURXQG E\ YLDV



)LJXUH 3&% /D\RXW ([DPSON

7KH PD[LPXP ,& MXQFWLRQ WHPSHUDWXUH VKRXOG EH UHVVWULFWHG WR
WKH PD[LPXP DOORZDEOH DQG VNLSSWLRQ BFWXDO SRZHU GLVVLSDWLRQ O
PD[LPXP SRZHU GLVVLSDWLRQ OLPLW LV GHWHUPLQHG XVLQJ (TXDWLRQ

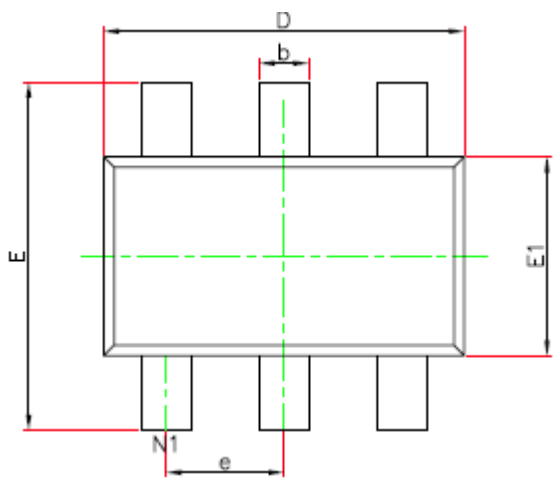
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ZKHUH

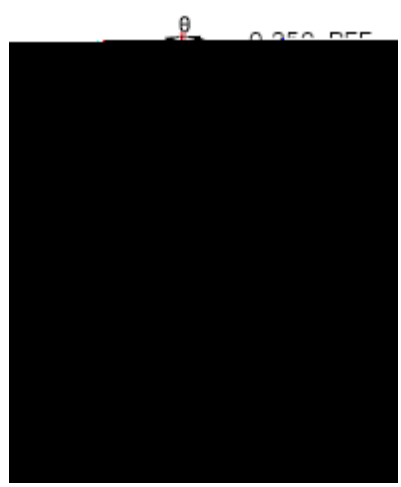
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5-\$ LV WKH WHPSHUDWLRQ WKHUPDO UHVLVWDQFH JLYHQ LQ WKH 7KHUPD

7KH UHDO WHPSHUDWLRQ WKHUPDGRUHWKMWSDQFH JH JUHDWO\ GHSHQGV RQ V
WKHUPDO SDG FRQQHFWLRQ DQG HQYLURQPHQWDO IDFWRU 8VLQJ WKLFN
SODWH HQKDQFH WKH WKHUPDO SHUIRUPDQFH 8VLQJ WRSRODLDV BQQEHR
ODIHU DURXQG WKH ,& ZLWKRXW VROGHU PDVN DOVR HQKDQFH WKH WKHU

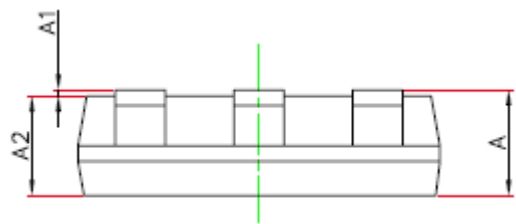
PACKAGE INFORMATION



7 2 3 9 , (:



% 2 7 7 2 0 9 , (:



6 , ' (9 , (:

1. 'UDZLQJ SURSRVHG WR EH PDGH D -('(& YDULDWLRQ

2. 'UDZLQJ QRW WR VFDOH

3. \$OO OLQHDU GLPHQVLRQV DUH LQ PLOOLPHWHU

4. 7KHUPDO SDG VROGHU ERDUG

5. 'LPHQVLRQV RI H[SRVHG SDG RQ ERWWRP RI SDFNDJH GR QRW LQFOXGH PROG IODVK

6. &RQDFW 3&% ERDUG IDEULFDWLRQ IRU PLQLPXP VROGHU PDVN ZHE WROHUDQFHV EHWZHHQ WKH SLQV
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| E | SDFNDJH | RXWOLQH | 02 |
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| LPHW/HUV | | | |
| G | ° | | ° |



TAPE AND REEL INFORMATION

