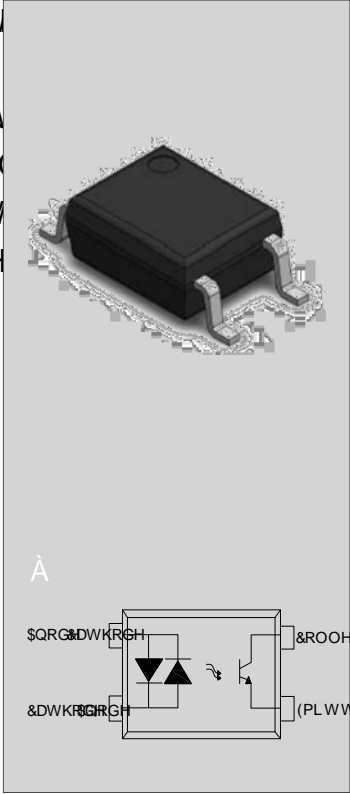




^ Z/Wd/KEW

7KH SURGXFWV DUHF RUXSDQHVUWWRUDRSSO
SDFNDJH 7KH GHYLFSDFRPELQHVDDQHG
GLRGHDV WKH HPLWWHU ZKLFK LV RSDW
SKRWRWUDQVLVWRVKIGHURERXWRUFRSO
VWUXFWXUH WKHGHPRFWVSWRYEGHNLW
7KH SURGXFWV DUHVZLGHFOPRVGHGSRZH
SURJUDPPDEOHFRXQWHUKROGHDSOLDQF
HTXLSPHQW



D /E & dhZ ^

+LJK LVRODWLRQ 9506
2SHUDWLQJWHPSHUJHDWXUWR f &
5R+6 5(\$&+ &RPSOLDQFH
+%0 + \$ 00 &'0 &
&4& DSSURYHG
9'(DSSURYHG
8/ DSSURYHG

^K>hd D y/DhD Z 7H/ESAUUDWXUH f &

Parameter	Symbol	Value	Unit
,QSXW)RUZDUG &XUUHQW ,)		
	3HDN)RUZDUG &XUUHQW	7	\$
	5HYHUVH 9ROWDJH 95		
	3RZHU 'LVVLSDWLRQ 3'		
2XWSXW	&ROOHFWRU HPLWWHU 2 9ROWDJH	9	
	(PLWWHU FROOHFWRU 2 9ROWDJH	9	
	&ROOHFWRU &XUUHQW		
	3RZHU 'LVVLSDWLRQ 3&		P:
7RWDO 3RZHU 'LVVLSDWLRQ	3WRW		P:
,VRODWLRQ 9ROWDJH	9LVR	8	9UPV
2SHUDWLQJ 7HPSHUDWXUH	7RSU	a	
-XQFWLRQ 7HPSHUDWXUH	7M		

6WRUDJH 7HPSHUDWXUH	7VWJ	a	
6ROGHULQJ 7HPSHUDWXUH	7VRO		

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> dZ/ > , Z d Z7AØ/SAUDWXUH f&

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
, QSXW)RUZDUG 9ROWDJH) “ 9P\$,			9
	7HUPLQDO & DSDFLWWDQFH	9 1 0+] &					S)
2XWSXW	&ROOHFWRU (PLWWHU 9&(9 GDUN FXUUHQW ,&(2						Q\$
	&ROOHFWRU (PLWWHU ,& P\$ EUHDNGRZQ YROWDJH %9(2						9
	(PLWWHU &ROOHFWRU (P\$ EUHDNGRZQ YROWDJH %9&2						9
7UDQVIHU &KDUDFWH	&XUUHQW WUDQVHU UDWL) “ P\$ 9&(9					
	&ROOHFWRU (PLWWHU) “ P\$ 6DWXUDWLQR 9ROWDJH, & P\$						9
	,VRODWLQR UHVLVWDQFH	'& 9 a 5 +		5			
)ORDWLQJ & DSDFLWWDQFH	9 1 0+] &					S)
	HULVWLFV	9&(9					
	&XW RII)UHTXHQF\	& P\$ 5/ G %					N+]
	5LVH 7LPH	W					V
)DOO 7LPH	W	9&(9 & P\$				
5HVSQRVH 7LPH	WQ Wl	5/					

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CTR Rank	Min. (%)	Max. (%)	Test Condition
3) , “ P\$ &9 9
) , “ P\$ &9 9
4) , “ P\$ &9 9
) , “ P\$ &9 9

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FIG.1: 0D[\$OORZDEOH /(')RUZDUG \$PELHQW 7HPSHUDWXUH

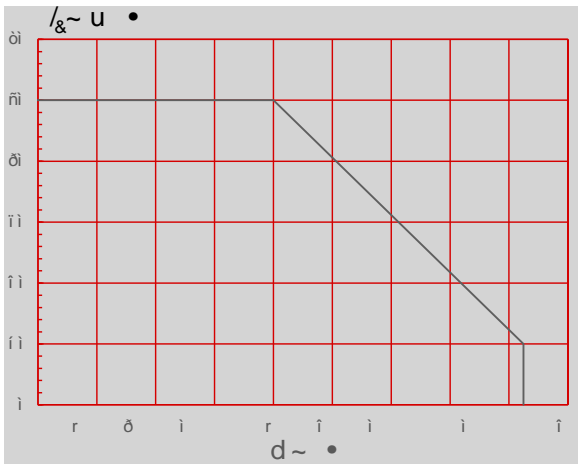


FIG.2: &ROOHFWRU 3RZHU 'LVVLSWLF 7HPSHUDWXUH

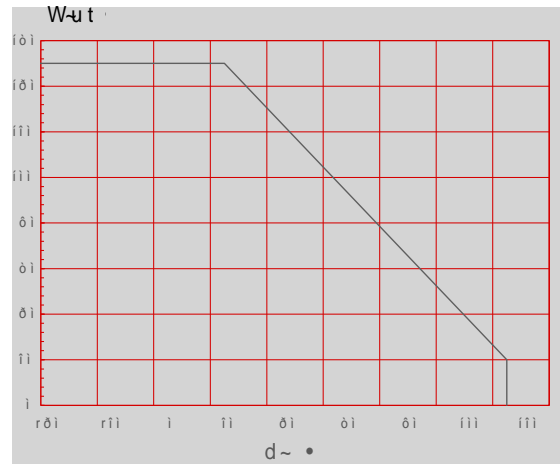


FIG.3:)RUZDUG &XUUHQW YV)RUZDUG

FIG.4: R &ROOHFWRU 'DU YV \$PELHQW 7HPSHUDWXUH

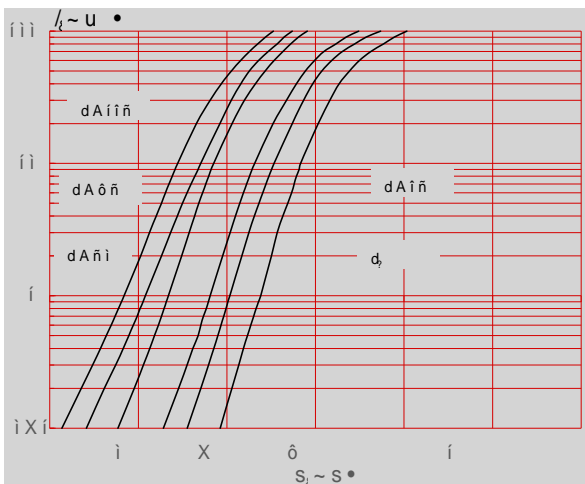


FIG.7: 1RUPDOLJHG & XUHQW 7UDQV IFIG.8: 51RWLPD YJHG & ROOHFWRU HPL
\$PELHQW 7HPSHUDWXUH 9ROWDJH YV \$PELHQW 7HPSHUDV

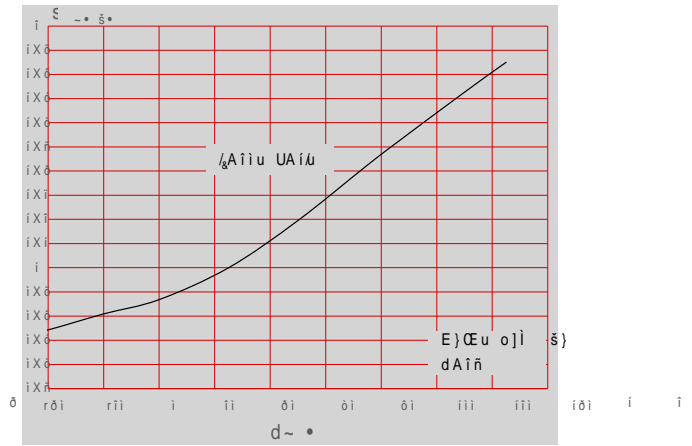
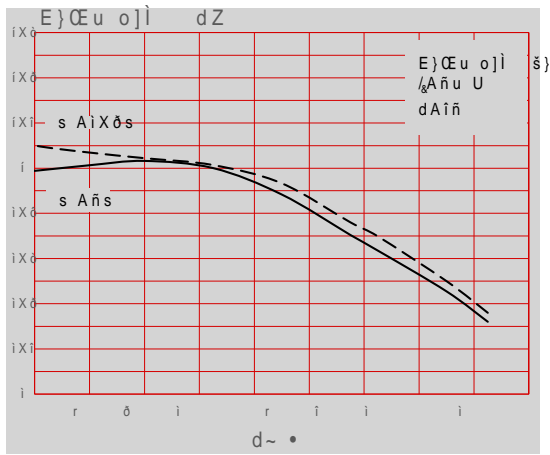
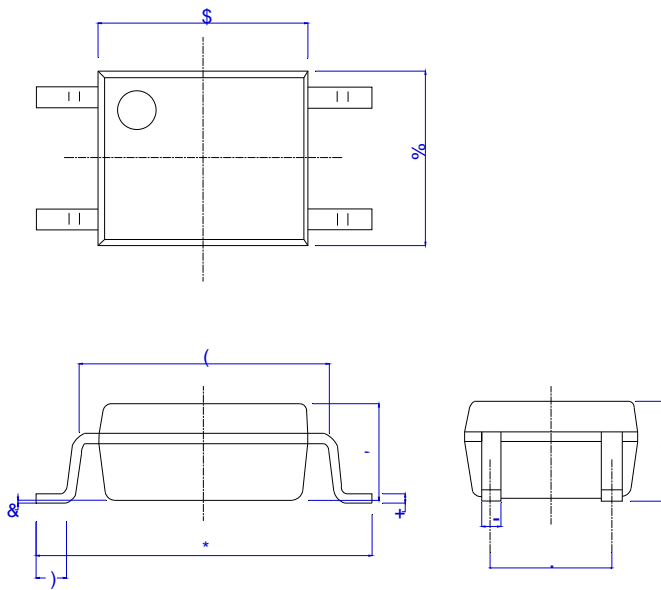


FIG.9: 5HVSQRVH 7LPH YV /RDG 5HV IFIG.10: Q BHTXHQF\ 5HVSQRVH

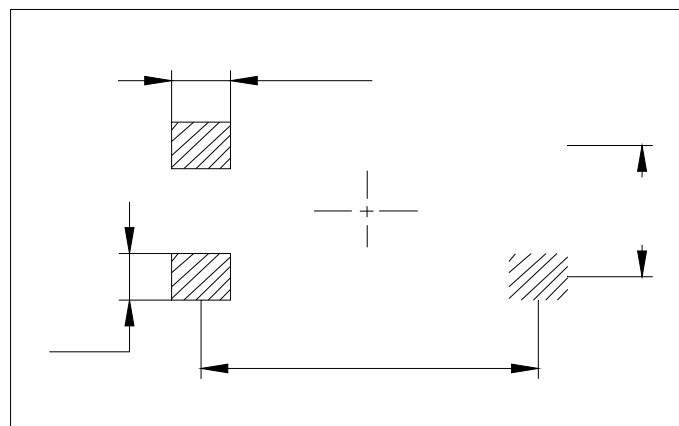


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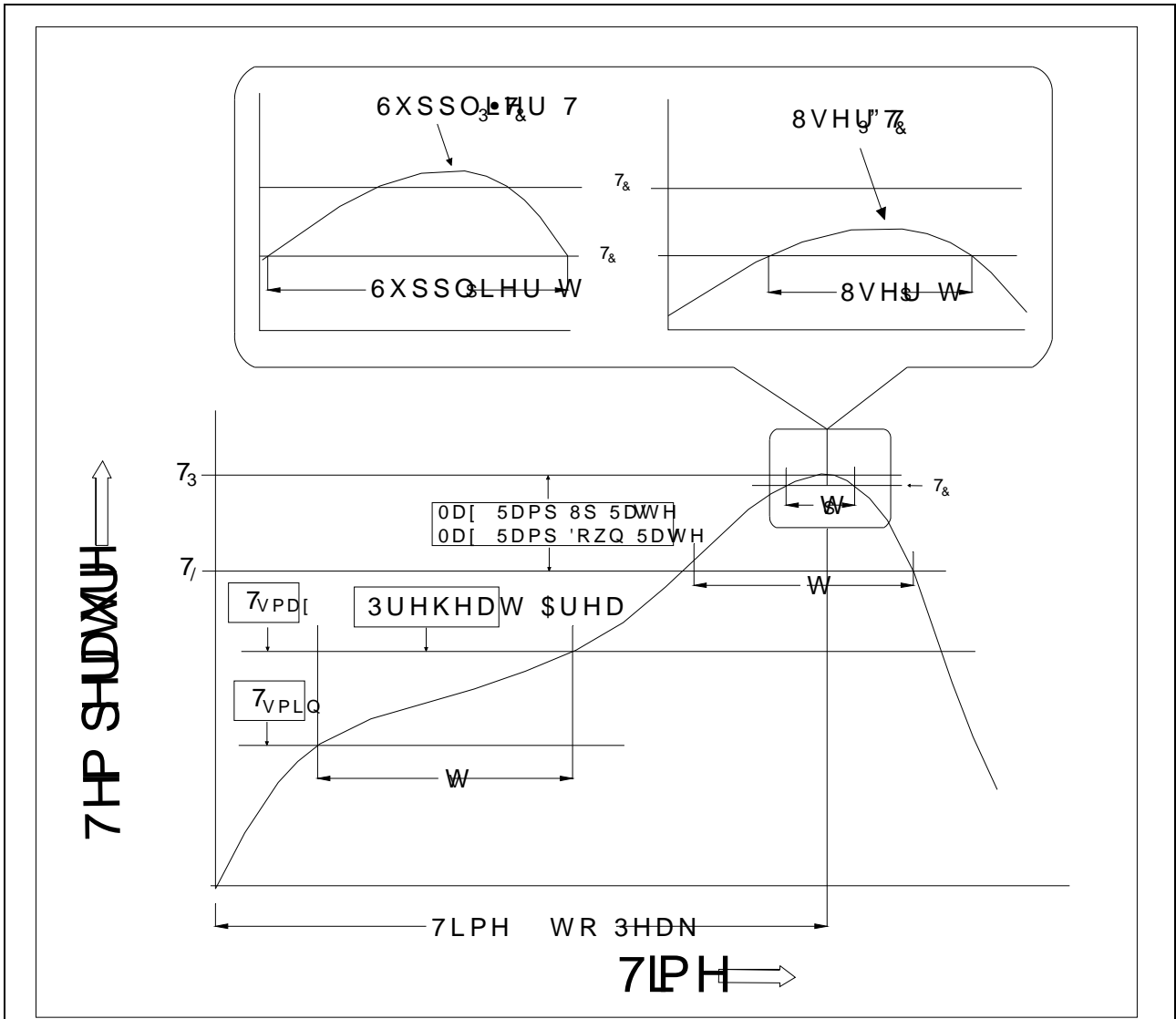


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Option None

⊖

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Profile Feature	Sn-Pb Assembly Profile	Pb-Free Assembly Profile
7HP SHUDWXUH 0LQ	7VPLQ	
7HP SHUDWXUH 0D[7VPD[
7LPH WV IURP 7VPLQ WR 7VPD[VHFRQGV
5DPS XS 5DWH W/ WR W	VHFRQG PD[VHFRQG PD[
/LTXLGXV 7HP SHUDWXUH 7/		
7LPH W/ 0DLQWDLQH \$ERYH 7/		VHFRQGV
3HDN %RG\ 3DFNDJH	7HP SHUDWXUH	
7LPH W3 ZLWKLQ		VHFRQGV
5DPS GRZQ 5DWH 73 WR	VHFRQG PD[VHFRQG PD[
7LPH WR 3HDN 7HP SHUDWXUH		PLQXW R\ QXW HV PD[

1RWH

5HIORZ VROGHULQJ LV UHFRPPHQGHG/ DWRZKH QHPSHWDWWDQW DQW
\$YRLG GLUHFV FRQVHDVSRPHQZDQWXRUDFRU H[FHHGLQJ LWV PD
VWRUDJH WHPSHUDWXUH

\$SSOLFDWLRQ RKHUSRYXENRQLVLSOHGDDWHG WHPSHUDWXUHV ,QV
VFHQDULRV DQHPSVOLGRWRHFFHHG 1

(QVXUH WKH FRPSRQHQW KDV FRROHG SURPHQKODQZLXPSWHDXHCL
PDQXIDFWXULQJ VWHSV

7KH FRPSRQHQW KDM BQKHODUZKHQVWDQGHGKFBQGLWLRQV

5HFRPPHQG VWRUDJH 7HPS a f&

5HFRPPHQG VWRUDJH KXPLGLW\

06/ OHYHO 06/

,QIRUPDWLRQ IXUQXFKQW ILQ WKOVLHGMB DQGEUHDQFLDXEUDH +R
-LDQJVVX -LH-LH 0LRRHOWHFDWRVQLFHVQLRVUHRUSRQVLEFRQVHT
RI XVH ZLWKRXW FRQVLGHUDWLRQ IRG MWFKQIQIRUPDWLRQ
LQ WKLV GRFXPHQVLDQJYXZLWHFRXWRQRWLFH DSDUW IURP V
VLJQHG -LDQJVVXOLHVLZILFRKPWKH DJUHHPHQW

3URGXFVW DQG LQIRUPDWLRQ SURYLGHGJHQHVKWVRGFSFXPH
-LDQJVVX -LH-LH DVVXIPHLVQW\URVSDQVLQIULQJHPHQW RI RW
ZKLFK PD\ UHVXOW IURP WKH XVH RI VXLK SURFXPHQW DQGS HL
DQG UHSODFHV DOO LQIRUPDWLRQ SUHYLRXVO\ VXSSOLHG



LV D UHJLVWHUHG DQJXGHLPHUN RUF-URHOWHFWURQLFV & R
&RS\ULJKW -LDQJVVX -LH-LH QLVRRHOWHFWURQLFV UHVH