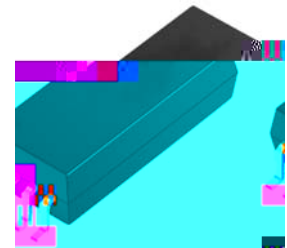




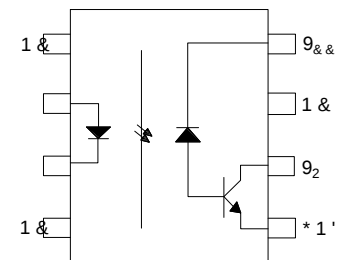
DESCRIPTION:

7KH SURGXFWV DUHHG %S WKR JKRXS ØHU
LV D VPDOO RXWOLHQH RYXSDIHUFV XPRX
,W FRQVLVWV RI D KLJK RXWSXW SRZHU
WR D KLJK VSHHG SKRWRJIRUG IFRG S WWDLO
SODVWLF :623 DQG JXHUSSDQW HGLWV DFC
D FOHDUDQFH RI • PWRQGV DIQLHQQKH
7KHUHIRUH LW PHHGV LWXODMILRQRE
RI LQWHUQDWLRQDO VDIHW\ VWDQGDUG
LQ SURJUDPPDEOH XPRQWLDRODQYHUWQ
SRZHU VXSSOLHV



MAIN FEATURES

+LJK LVRODWLRQ 9506
&7,! 9
2SHUDWLQJ WHPSHUDWXUH WR f &
5(\$+ 5R+6 FRPSOLDQFH
+%0 + \$ 00 0 &'0 &
&4& DSSURYHG
9'(DSSURYHG
8/ DSSURYHG



Truth Table

I('	2XWSXW
21	/
2))	+

ABSOLUTE MAXIMUM RATINGS 7HP SHUDWXUH f &

Parameter		Symbol	Value	Unit
,QSXW	)RUZDUG &XUUHQW)			
	3HDN)RUZDUG &XUUHQW		7	\$
	5HYHUVH 9ROWDJH 95			
	,QSXW 3RZHU 'LVVLSDWLRQ		3	P:
2XWSXW	6XSSO\ 9ROWDJH &&		9	
	2XWSXW 9ROWDJH 92			

	2XWSXW & XUUHQW	2		
	2XWSXW 3RZHU 'LVVLSDWLRLQ	3		P :
7RWDO 3RZHU 'LVVLSDWLRLQ	3WRW			P :
,VRODWLRLQ 9ROWDJH	9LVR	8		9UPV
2SHUDWLQJ 7HPSHUDWXUH	7RSU	a		
-XQFWLRLQ 7HPSHUDWXUH	7M			
6WRUDJH 7HPSHUDWXUH	7VWJ	a		
6ROGHULQJ 7HPSHUDWXUH	7VRO			

NOTE1 $f_{osc} = 100\text{kHz}$ U $f_{osc} = 1\text{MHz}$ ($C_E < 10\text{pF}$ & $V_{DD} > 1.5\text{V}$)

NOTE2 $(I_{DD} = 10\text{mA})$ U $Z_X, X_A \text{ diode}$

ELECTRICAL CHARACTERISTICS 7HPSHUDWXUH f &

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
,QSXW	RUZDUG 9ROWDJH		$V_{DD} = 1.5\text{V}$				V
	HYHUVH & XUUHQW		$f_{osc} = 100\text{kHz}$				Hz
	,QSXW & DSDFLWDQFH		$f_{osc} = 100\text{kHz}$ & $V_{DD} = 1.5\text{V}$				S)
2XWSXW	& XUUHQW WUDQVHU		$P_{DD} = 10\text{mW}$ & $f_{osc} = 100\text{kHz}$				W
	+LJK /HYHO & XUUHQW	t_{PLH}	$V_{DD} = 1.5\text{V}$ & $f_{osc} = 100\text{kHz}$				ns
	+LJK /HYHO & XUUHQW	t_{FALL}	$V_{DD} = 1.5\text{V}$ & $f_{osc} = 100\text{kHz}$				ns
	/RZ /HYHO 6XSSO\ & XUUHQW	t_{RST}	$f_{osc} = 100\text{kHz}$ & $V_{DD} = 1.5\text{V}$				ns
	+LJK /HYHO 6XSSO\ & XUUHQW	t_{FALL}	$f_{osc} = 100\text{kHz}$ & $V_{DD} = 1.5\text{V}$				ns
	/RJLF /RZ 2XWSXW 9ROWDJH	t_{RST}	$V_{DD} = 1.5\text{V}$ & $f_{osc} = 100\text{kHz}$				ns
	,VRODWLRLQ 5HVLVWDQFH	$R_{DS(on)}$	$I_D = 10\text{mA}$ & $V_{GS} = 1.5\text{V}$				Ω
	)ORDWLQJ & DSDFLWDQFH	t_{RST}	$f_{osc} = 100\text{kHz}$ & $V_{DD} = 1.5\text{V}$				S)
6ZLWFKLQJ & KDUDFW	3URSDJDWLRLQ 'HOD\ 7LPH WR /RJLF /RZ	t_{RST}	$V_{DD} = 1.5\text{V}$ & $f_{osc} = 100\text{kHz}$				V
	3URSDJDWLRLQ 'HOD\ 7LPH WR /RJLF +LJK	t_{RST}	$V_{DD} = 1.5\text{V}$ & $f_{osc} = 100\text{kHz}$				V

&RPPRQ 0RGH
7UDQVLHQW
,PPXQLW\ DW /R^{&0+}JLF
+LJK

9&0 9SS
5/

Characteristics Curve

FIG.1:)RUZDUG &XUUHQW YV)RUZDUG &XUUHQW 2XWSXW &XUUHQW 7HPSHUDWXUH

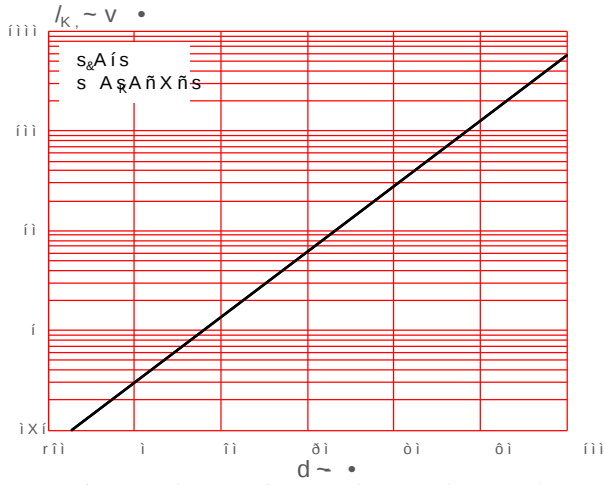
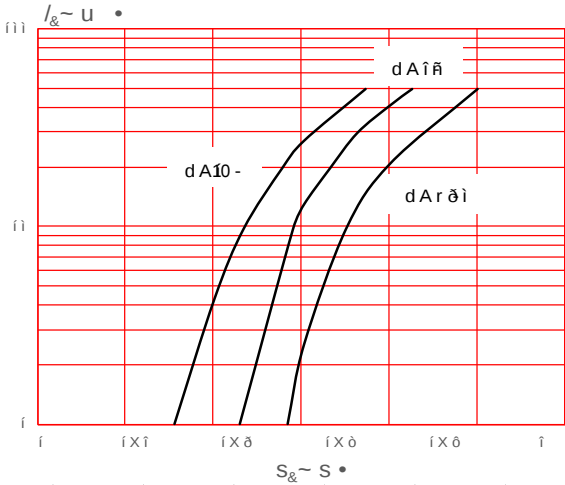


FIG.3: 2XWSXW &XUUHQW YV)RUZDUG &XUUHQW 7UDQVIHU 5DWLR Y &XUUHQW

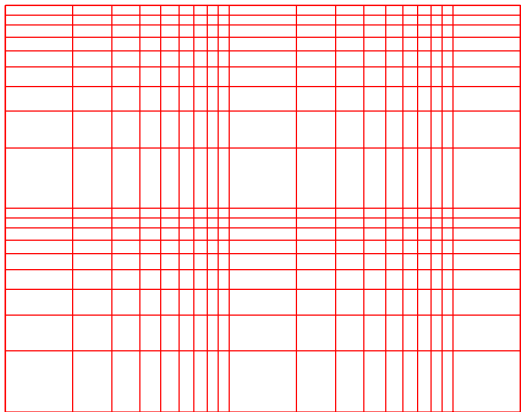
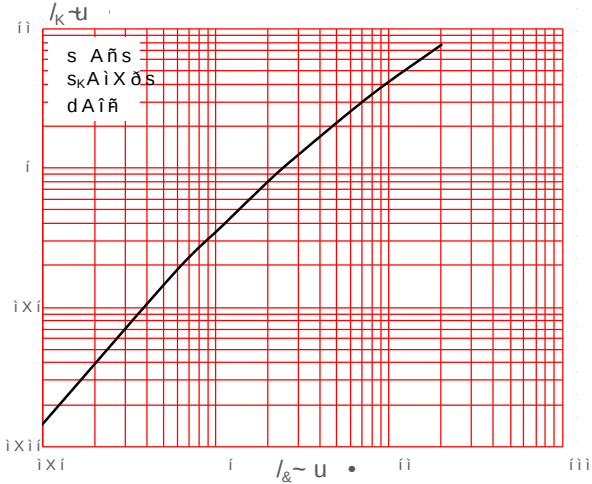


FIG.7: /RZ /HYHO 2XWDSJHWY9RQ\$PELHQW
7HPSHUDWXUH

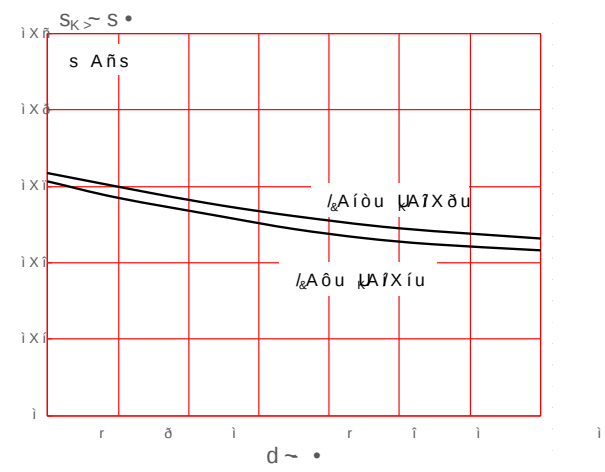


FIG.8: 3URSDJDWLRQ 'HOD\ YV /RDG
5HVLVWDQFH

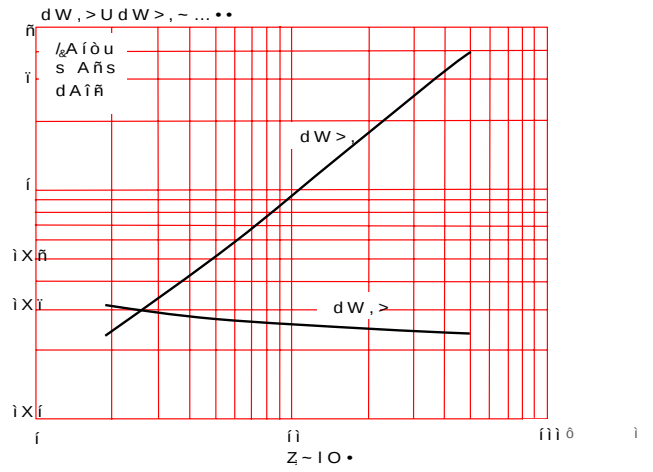
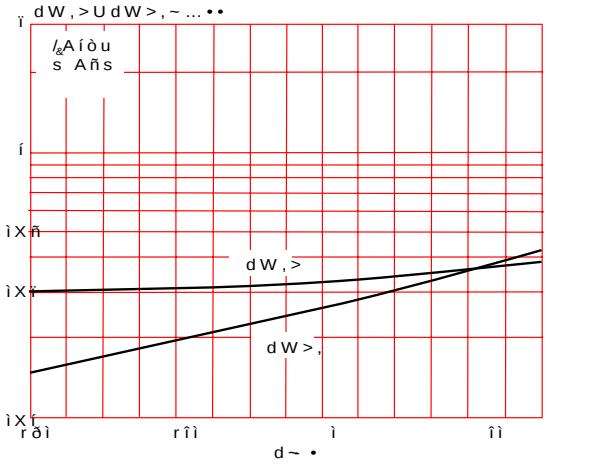


FIG.9: 3URSDJDWLRQ 'HOD\ YV \$PELHQW
7HPSHUDWXUH



TEST CIRCUITS

Fig.10: Test Circuit of tPHL, tPLH

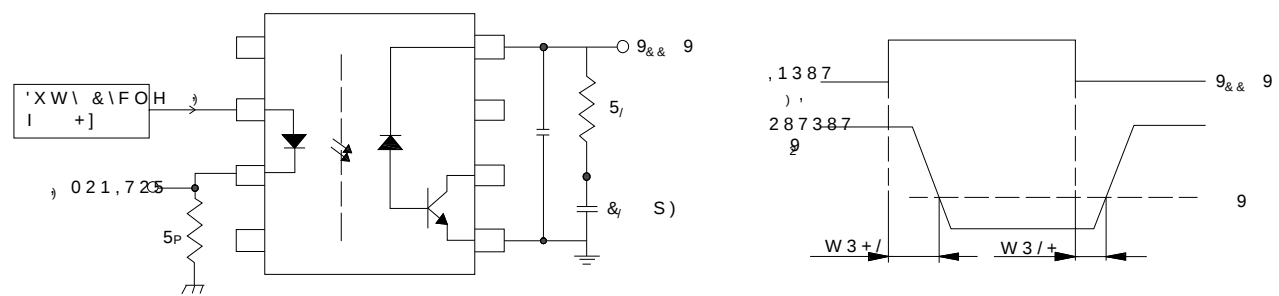
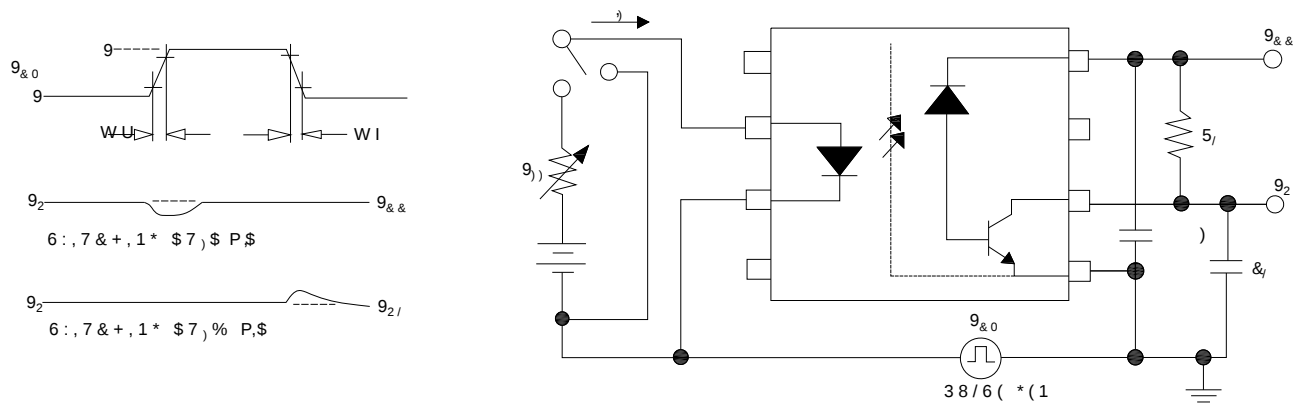
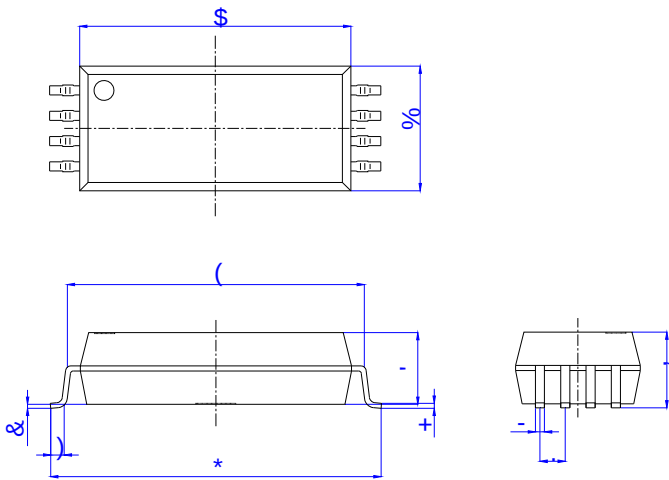


Fig.11: Test Circuit for Transient Immunity and Typical Waveforms

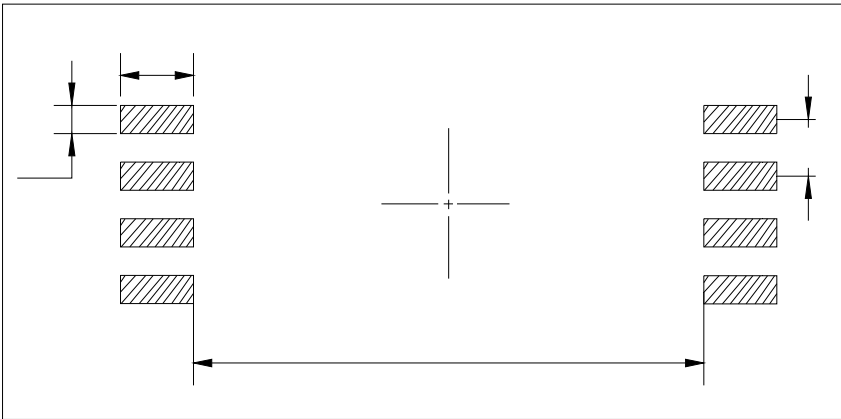


Package Dimension (Unit: mm)

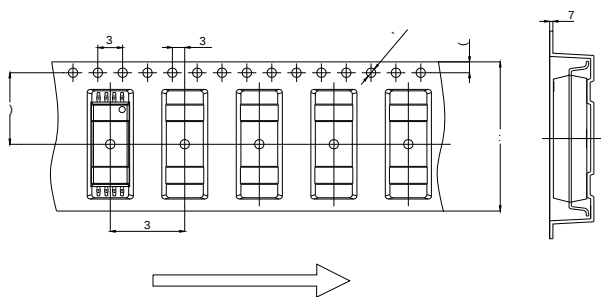


5 H I	' L P H Q V L R Q V					
	0 L O O L P H W H U V			, Q F K H V		
	0 L Q	7 \ S	0 D [	0 L Q	7 \ S	0 D [
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RECOMMENDED SOLDER MASK (Dimensions in mm unless otherwise stated)

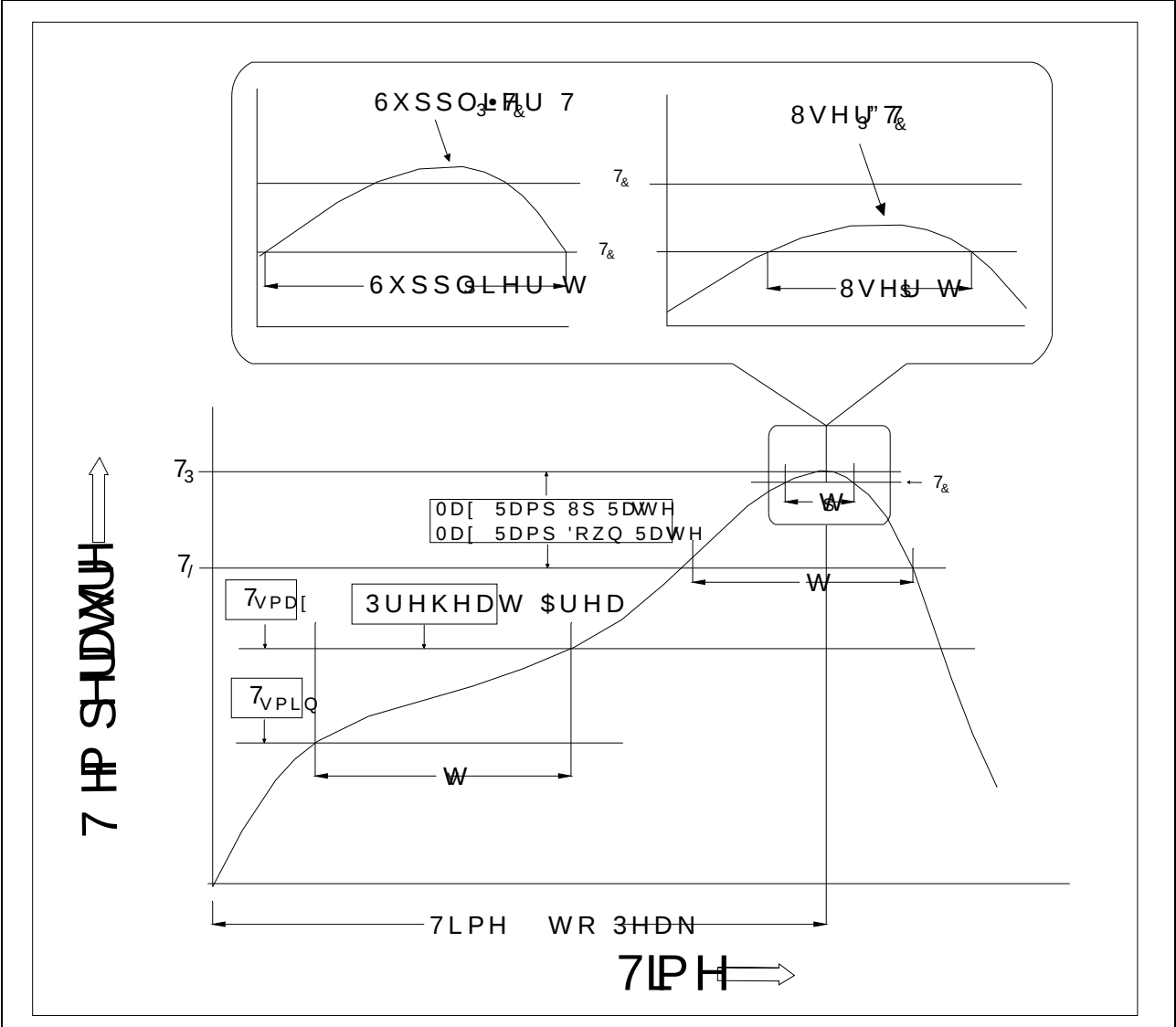


CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)



5 HI	'LPHQVLRQV					
	0LOOLPHWHUV			,QFKHV		
	0LQ	7\ S	0D[	0LQ	7\ S	0D[
'						
3						
3						
3						
(						
)						
7						
:						

REFLOW INFORMATION



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

1RWH

5HIORZ VROGHULQJ LV UHFRPPHQGHG/ DWRZQH QHPSHWDWWDQWWDQW
 \$YRLG GLUHFV FRQWHDVSRPHQZDQVWRUDFRU H[FHHGLQJ LWV PD
 VWRUDJH WHPSHUDWXUH
 \$SSOLFDWLRQ RKHUSRYXERGRQWLSOHGDDWHG WHPSHUDWXUHV ,QV
 VFHQDULRV DQHPSVOLHQRWRHFFHHG 1
 (QVXUH WKH FRPSRQHGW KDV FRROHG SURFHVWHKQWZMXPSHWDWWDQW
 PDQXIDFWXULQJ VWHSV
 7KH FRPSRQHGW KDV BQKHODUZKHQVWRUDJHGXFRQGLWLRQV
 5HFRPPHQG VWRUDJH 7HPS a f &
 5HFRPPHQG VWRUDJH KXPLGLW\
 06/ OHYHO 06/

,QIRUPDWLRQ IXUQXPHQW ILQWKOLHGRHG WR EH DFFXUDWH D
 -LDQJYX -LH-LH 0LRRHOWHGDWRQLFHVQLVUHRUSRQHLERQVHT
 RI XVH ZLWKRXW FRQVLGHUDWLRQ IRG MWFKQLQIRUPDWLRQ
 LQ WKLV GRFXPHQW LQJYXZLWHRXWRQRWLFH DSDUW IURP V
 VLJQHG -LDQJYXOLHVLZLWKPWKH DJUHHPHQW
 3URGXFV DQG LQIRUPDWLRQ SURYLGHGLQJHQRQWVRGSRXV
 -LDQJYX -LH-LH DVVXPHLOQW\URVSDQVLQIUHQJHPPHQW RI RW
 ZKLFK PD\ UHVXOW IURP WKH XVH RI VXLV SURGXPHQW DQSHL
 DQG UHSODFHV DOO LQIRUPDWLRQ SUHYLRXVO\ VXSSOLHG
 LV D UHJLVWHUHGDQJYXGLHUNRUFURHOWHGWURQLFV &R
 &RS\UKJKW -LDQJYX -LH-LH OLVRHOWHGWURQLFV UHVH