$&-7 + &: $ 75,$& 5HY $

^ Z/Wd/KEW

7KH $&-7 + &: WULDF LV VXLWDEOH IRU JHQHUDO SXUSR
$& VZLWFKLQJ ,W FDQ EH XVHG DV DQ 21 2)) IXQFWLRQ LQ
DSSOLFDWLRQV VXFK DV WKH FRQWURO RI GXW\ FXFOH PRWRU
VWDUWLQJ FLUFXLWV RU WKH RSHUDWLRQ LQ OLJKW
GLPPHUV PRWRUV VSHHG FRQWURO 7KH &: 7 + &:
HPEHGV D 796 VWUXFWXUH WR DEVRUE WKH LQGXFWLYH WX
HQHUJ\ VXFK DV WKRVH GHVFULEHG LQ WKH ,(&
VWDQGDUGV 3DFNDJH 72 LV 5R+6 FRPSOLDQW

D /E & dhZ ^

6\PERO	9DOXH	8QLW
,7 506		
9'50 9$50		9
,*7		P$

$

^K>hd D y/DhD Z d/E'^

3DUDPHWHU	6\PERO	9DOXH		8QL
6WRUDJH MXQFWLRQ WHPSHUDWXUH UDQJH	7VW			
2SHUDWLQJ MXQFWLRQ WHPSHUDWXUH UDQJH	7M	7		
5HSHWLWLYH SHDN RII VWDWH YROWDJH	9'50	7	9	
5HSHWLWLYH SHDN UHYHUVH YROWDJH	9560	7	9	
506 RQ VWDWH FXUUHQW	,7 506			
1RQ UHSHWLWLYH VXUJH SHDN RQ VWDWH FXUUHQW IXOO F\FOH	,760		$	
1RQ UHSHWLWLYH VXUJH SHDN RQ VWDWH FXUUHQW				
,W YDOXH IRU PXOWLQ W	,W		$ V	
&ULWLFDO UDWH RI ULVH RI RII VWDWH FXUUHQW ; h,*7 I +] 7	G, GW		$ V	
3HDN JDWH FXUUHQW W	,*0		$	
$YHUDJH JDWH SRZHU GLVVLSDWLRQ 7	3*9			
3HDN JDWH SRZHU	3*0		:	

3HDN SXOVH YROWDJH 7M QRQ UHSHWLWLYH RII VWDWH),*	9SS		N9

> dZ/ > , Z d Z/^d/X^QOHVV RWKHUZLVH VSHFLILHG

6\PERO	7HVW &RQGLWLRQ		4XDGUDQW		9DOXH
,*7	9' 9 5		0$;		P$
9*7			0$;		9
9*'	9' 9'50 7M 5/ N		0,1		9
,/	,* *7		0$;		P$
,+	,7 P$		0$;		P$
G9 GW' 99 *DWH 2SHQ 7			0,1		9 V
G, GW F G9 GW F 9 V			70,1		$ PV
WQ	,* P$ $, P$ 5, P$ 7M		7<3		V
WII					
9&/	&/ P,$S WPV		0,1		9

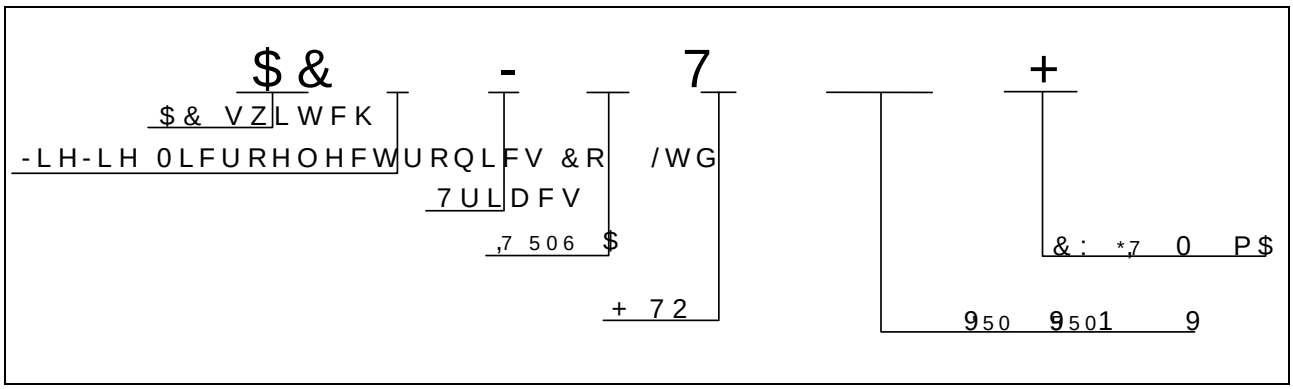
^d d/ , Z d Z/^d/ ^

6\PERO	3DUDPHWHU		9DOXH 0$;		8QLW
970	70 $SW V	7M			
972	7KUHVKROG YROWDJH	M	7		
5'	'\QDPLF UHVLVWDQFH	M	7	P	
,'50	9' 9'50 9S 9550	7M			
,550		7M			

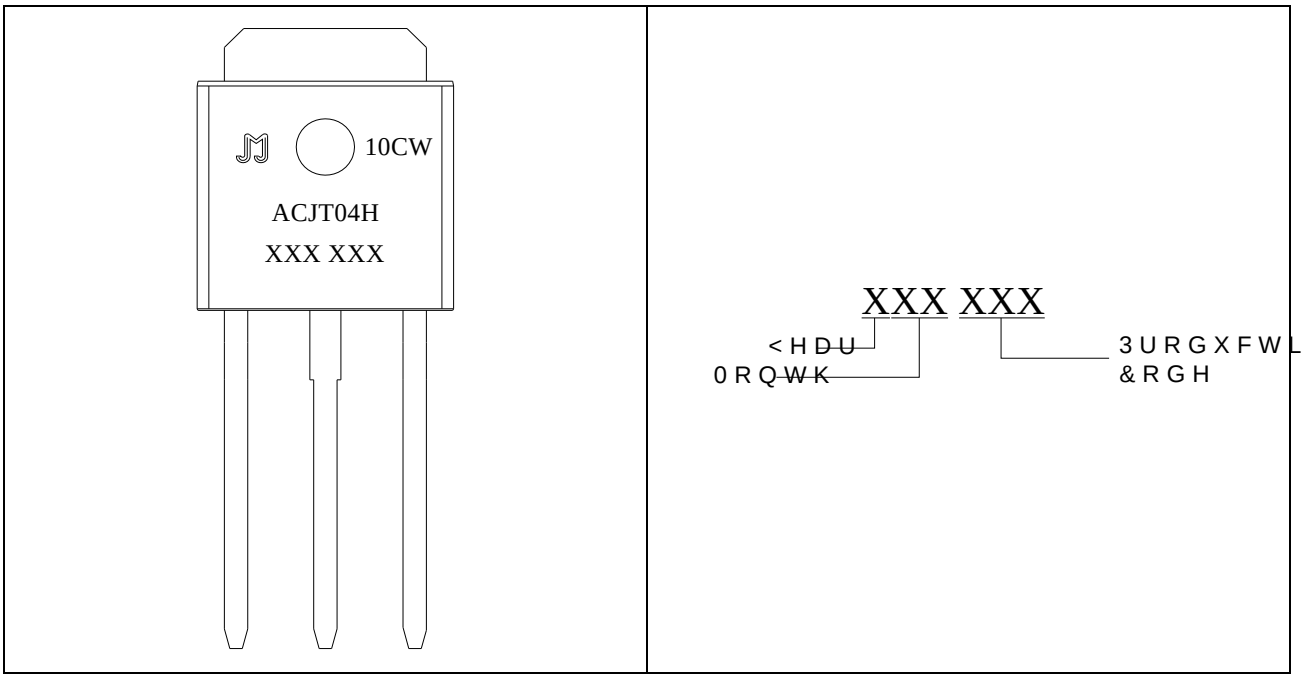
d, ZD > Z ^/^d E ^

6\PERO	3DUDPHWHU	9DOXH		8QLW
5WK M	FMXQFWLRQ WR FDVH $&		:	
5WK M	DMXQFWLRQ WR DPELHQW $&		:	

KZ Z/E' /E&KZD d/KE

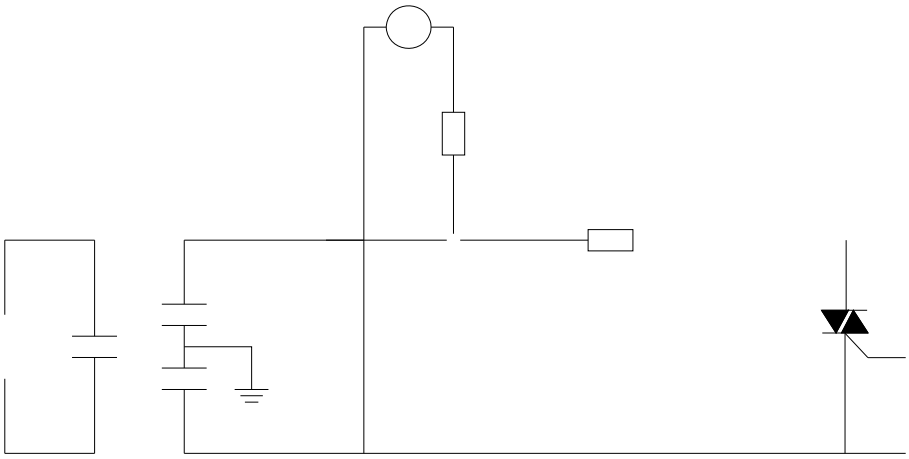


D Z</E'



),* 0D[LPXP SRZHU GLVVLSDWLRQ Y)H*UV5X0/6 5R0 VWDWH FXUUHQW YH
RQ VWDWH FXUUHQW WHPSHUDWXUH

),* Ö7HVW FLUFXLW IRU LQGXFWLYH DQG VWDWLF GLVFKDUJHV OR



KZ Z/E' /E&KZD d/KE

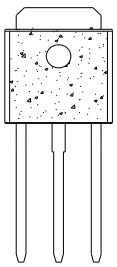
2UGHU FR	9ROWDJ 9'50 9$50 9	,*7 P$	3DFNDJ	%DVH SFV	'HOLYHU\ PRGH
$&-7 + &:			72		7XEH

'RFXPHQW 5HYLVLRQ +LVWRU\

'DWH	5HYLVLRQ	&KDQJHV
$SU	$	/DVW XSGDWHG
2FW	$	5HYLVH 3$&.$*(0(&+$1,&$/ '7

W < ' D , E/ > d





,QIRUPDWLRQ IXUQLVKHG LQ WKLV GRFXPHQW LV EHOLHYHG WR EH DFFXUDWH D
-LDQJVX -LH-LH 0LFURHOHFWURQLFV &RUS RU LWV VXEVLGLDULHV &RQWULEXWRUV SURYLGH
RI XVH ZLWKRXW FRQVLGHUDWLRQ IRU LWV FKRLFH RU XVH LQ DQ\ SDUWLFXODU DSSOL
LQ WKLV GRFXPHQW &RS\ULJKW ZDUUDQWLHV RWKHU WKDQ WKRVH VHW IRUWK
VLJQHG -LDQJVX -LH-LH DQG LWV VXEVLGLDULHV DOO LQIRUPDWLRQ SUHVHQW
3URGXFWV DQG LQIRUPDWLRQ GSRUWHGQHG KDYH QR LQIUL
-LDQJVX -LH-LH DVVXPHEHVOLQWR\UHVSRQVLEOQWKHLQJHQWW RI WK
SDUWLHV ZKLFK PDH UHVHXRIWVXUFKPSWEHDWWRQDQ7KLVQGRFXPH
VXSHUVHGHV DQG UHSODFHV DOO LQIRUPDWLRQ SUHYLRXV
LV D UHJLVWHUHGQJUDG-LHD-UHN ORLF-LR H/WHGWURQLFV &
&RS\ULJKW ‹ -LDQJVXR-HLHE-EWURQLEJK&RV U/HWWGHUSYOHG