

E<sup>a</sup> G K46%ö • P xL-+-+k i ž  
\$ [LDO /HDG /DVHU PDUN 0 /& & V



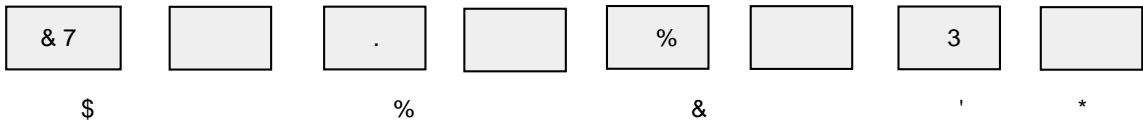
1 ( .  
) HDWXUH

%0% E , iH ] , F8 >8 P i >û, ° - '5L µ \ ; >û oí  
0LQLDWXUH VL]H ) HDUWH FHD SDFLNDEHDEJOVXLRW DXWR SODFHPHQW  
) ä" ] G78 7 >û , 6B - ? N8¥, °Lh%α ] 73 = p æ p Ü 6F'# ]  
( SR [ \ UHVLQ FRDWLQDIFQWDSVHM RHJ P B B 7 HVVQD Q X PL P LHFVKD Q Q SDKH V DWUWHQV W W D  
P+U Ý = ü p . P0 7P Á Ý ÷  
6WDQGDUG VL]H YDULRXV OHDG FRQILJXUDWLRQ

1 Ê+^  
\$ SSOLF DWLRQ

68b+^FJ ÷  
\*HQHUDO SXUSRVH JRRGV

1 Á ->ž/p#  
3DUW 1XPEHU



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Ý ÷ 2± a 3URGXFW 7\SH	
- &RGH	2± a 7\SH
&&	2±E <sup>a</sup> G K46%ö • P xL-+-+k i ž & ODVLHOHFWULF \$ [LDO /HDG /DVHU PDUN 0 /& & V
& 7	2±E <sup>a</sup> G K46%ö • P xL-+-+k i ž & ODVLHOHFWULF /HDG /DVHU PDUN 0 /& & V

%

=0& iH 1RPLQDO & DSDFLWDQFH	
f Z f ! • p ? ~ ! • , D 6 f ! • > ž / p M , ° ' ! ) LUVW WZR G L Q L W L F D Q W D Q G W K H W K L H U G R G L J L W L V Q X P E H U Á , Æ ) R U H [ D P S O H S ) , 5 S )	

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+

K7P~E´ f Æ P P μ		
/HDG &RQILJXUDWLRQ		
	5L\»D 7DSH ZLGWK	PP
	5L\»D 7DSH ZLGWK	PP

1 p. = ' + k Á = i H © 31 > ž

6 L J H F R G H F D S D F L W D Q F H D Q G Y R O W D J H

p.žúr 6 L J H & R	F'j( ... ) Ö P P Ä			' + k Á 9 R O W D	= 0 & i H 99 *		
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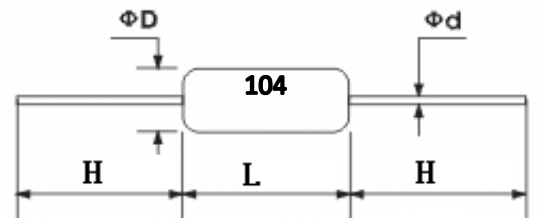
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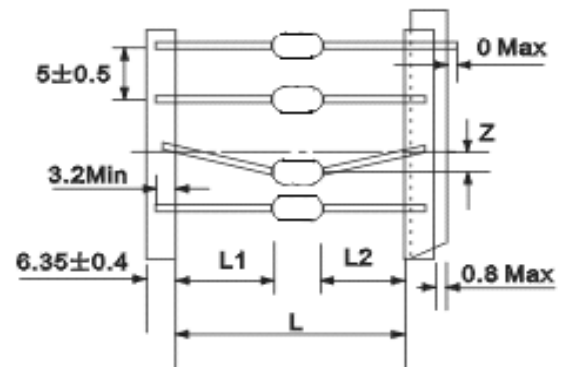


5 L \ p.

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5 L \ i E 7 D S H 6 W \ O H	/	=	š / / š
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1 %M- ]#•B i#

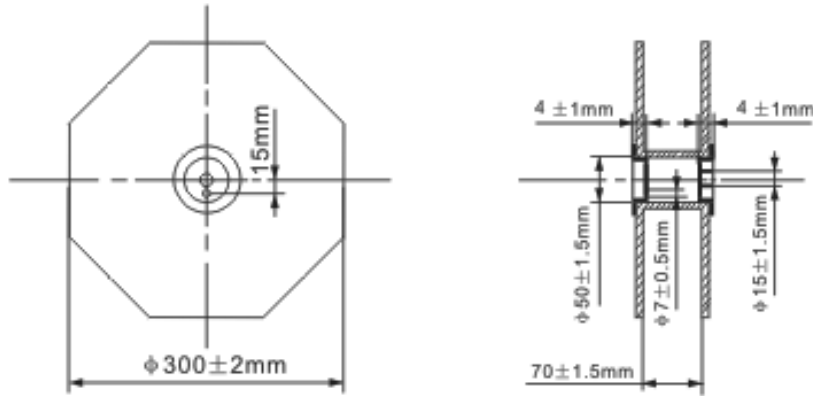
5HOLDELOLW\ 7HVW 0HWKRG

N-\$ ,WHP	¶e?."x 7HFKQLFDO 6SHFLILFDWL		#•B i# Å=# LRQ 7HVW 0HWKRG DQG 5HPDUNV		
iH &DSDFLWDQFH	,2± &ODVV	É1\>=Đ,°B% \$4Ý a ZLWKLQ WKH VSHFLILHG ,WROHUDQFH	=0& iH &DSDFLWDQFH	#•B NÇ)½ F0HHDVXULQJ )UHTXHQF\	#•B +k Á 0HHDVXULQJ 9ROWDJH
			&" S)	0 += "	" 9
&	,2± &ODVV	É1\>=Đ,°B% \$4Ý a ZLWKLQ WKH VSHFLILHG ,WROHUDQFH	=0& iH &DSDFLWDQFH	#•B NÇ)½ F0HHDVXULQJ )UHTXHQF\	#•B +k Á 0HHDVXULQJ 9ROWDJH
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•6M@ !™ = 'LVVLSDWLRQ )DFWRU )	,2± &ODVV	&• S) ' )" ,&Ø S) ' )" > & @ ;	=0& iH &DSDFLWDQFH	#•B NÇ)½ F0HHDVXULQJ )UHTXHQF\	#•B +k Á 0HHDVXULQJ 9ROWDJH
			" S)	0 += "	" 9
	,2± &ODVV	% ' ) "	=0& iH &DSDFLWDQFH	#•B NÇ)½ F0HHDVXULQJ )UHTXHQF\	#•B +k Á 0HHDVXULQJ 9ROWDJH
			&" X)	. += "	" 9
5 5N+kLq ,QVXODWLRLQ 5HVLVWDQFH	,2± &ODVV	&" Q) ,5• 0 ,&! Q) 5 &• )	#•B +k Á NÓĐ+k Á 0HHDVXULQJ 9ROWDJH 5DWHG 9ROWDJH #•B ,L* f 0 'XUDWLRLQ " V		
			,2± &ODVV	&" Q) ,5• 0 ,&! Q) 5 &• )	#•B \$µ ÜÆ" 7HVW +XPLGLW\ " #•B \$_ ÜÆ f 7HVW 7HPSUDWXUH #•B {t+k+k#wÆ " P\$ 7HVW &XUUHQW " P\$

N-\$ ,WHP	¶e?."x 7HFKQLFDO 6SHFLILFDW	#•B i# Å=# 7HVW 0HWKRG DQG 5HPDUNV WLRQ
6F+kÁ :LWKVWDQ 9ROWDJH	C Ê ? C^>á 1 0µL•Z GL QJ 1R EUHDNGR GDPDJH	#•B+kÁ 0HDVXULQJ ÖROWDJH 2± NÓĐ+kÁ &ODVV 5DWHG YROWDJH 2± NÓĐ+kÁ &ODVV 5DWHG YROWDJH 75#,L* f 0 'XUDWLRQ " V { t+k#w C ÊC>Eý P\$ 7KH FKDUJH GLVFKDUJH FXUUHQW LV OHVV WKDQ P\$ 1% †DL>ûL*%HWZHHQ WHUPLQDOV DQG ERG\ 6 Ö+kÁÆ 8 5 ZQ RU 75#,L*Æ a V 9 R O W D J H W L P H V U D W H G Y R O W D J H 'XUDWLRQ H "IE*9# 6PDOO PHWDOOLF EDOO PHWKRQ <+kĩžb%o >-%-*°p PP,°H "E*9,°ĩžc,  +°D 1%j: PP,°b%o C >°BPÄ+kÁ 6 Ö^.#D% D%1% †ÄH "E*9•L* > 6PDOO PHWDOOLF EDPOHWHZLVWKKDPOGEI BQV WCKHWHVWHFDS VKDOO EH VXEPHUJHG H[FHSW PP IURP\DKG WRSRHWLWPL QBE 7KH WHVW YROWDJH VKDOO EH DSSOLHRSLEBQVZHDG WKKHVKHRW EDOOV
%@] 6ROGHU D	@KW)½ Ê ] Ä /HDG ZLUH ELOLW\ FRYHUHG QHZ VROGHU FRDWLQJ	<+kĩžK46#@> a? 'Oĩ,°G^26\$#èc 0 ,ID#@,\$_Üp " ,°H " @KW@ \$J Å&X 0 # EÆ+kĩžb%o ËM^D/nKWM^4Ü a PÄ WKH OHDG ZLUH RI FDSDFLWURU LV GLSSHOKDQV DRU VRWLQ ZLWKHDLQWR PROWHQ VÄRIGHU' 6QRUSJ &X V ,Q ERWK FDVH GHSWK RI GLSSLQJ LV XS WR DERXW a PP IURP WKH WHUPL FRDWLQJ
6F'@ Ú# 5HVLVWDQF,H5 WR 6ROGHULQJL?ø %?÷•Z +HDW	û& & & * 0 f L f S) 1R VLJQLILFDQW f E,> DEQRUPDO LVUHLRQGAWODQV,QJKRXU RI SUHFRQGLWLRQLROORZHGEI DSSHDUDQFH KRXUV RI UHFRYHU\ XQGHU WKH VWDQGDUG FRQGLWLRQ °CÆ/Ä , 2± C^BPÄD, Ê^=ü—, A~C f E,Df#B > 5HFRYHU\ &ODV , , " KRXUV RI UHFRYHU\ XQGHU WKH VWDQGDUG	KW\$_Æ " ,L*Æ f V 6ROGHU WHPSHUDWXUH " f V 'XUDWLRQ #@>—,Æ<+kĩž >ĐÜp PP,Š°p PP,°3&µ> ,PPHUVHG FRQGLWLRQWKH, Q&HURDUG LZQWK PPGLDPHWHU /Ä, 2± C^BPÄD, Ê^=ü—, A~C f E,Df#B > 5HFRYHU\ )RU FODVV , " KRXUV RIGUHRQGHUWLRQGHWHWKMH /Ä , , 2± C^, ^BPÄf Ê~F> , AN°:*<Æ , E , , Ü-v^=ü 1R VLJQLILFDQW f E,> DEQRUPDO LVUHLRQGAWODQV,QJKRXU RI SUHFRQGLWLRQLROORZHGEI DSSHDUDQFH KRXUV RI UHFRYHU\ XQGHU WKH VWDQGDUG FRQGLWLRQ °CÆ/Ä , 2± C^BPÄD, Ê^=ü—, A~C f E,Df#B > 5HFRYHU\ &ODV , , " KRXUV RI UHFRYHU\ XQGHU WKH VWDQGDUG

N-\$ ,WHP	¶e?."x 7HFKQLFDO 6SHFLILFDWLRQ	#*B i# Å=# 7HVW 0HWKRG DQG 5HPDUNV
Q\$_CU9- +LJK 7HPSHUDWXUH /RDGLQJ 7HVW	• & & & * 0f L f S) ; 5 0f < ) 0 f ') & 2* &U S) 0 Ø &Sψ0 Ä &Å ; 5 0 < ) 0 & 50 X) 0 X)Ú & 5Ú X) 0 & 51 X)	+k ÁÆ CNÓ Ð+k Á ,L*Æ E, \$_ÜÆ& * ; 5 < 9 {+k+k#w ÆC ÊC»Eý P\$ t5π — ,Æ Ú\$_ t5π ,L*Æ E, ' & j̄ , L E, ' ; 5 < ¶ É \$\$\$SOLHG 9ROWDJH 5DWHG 9ROWDJH 'XUDWLRQ K 7HPSHUDWXUH
	, 5 55N+kLq, QVXODWLRQ 5HVLVWDQFH 1 0i RU	&KDUJH 'LVFKDUJH &XUUHQW P\$ PD[ &RQGLWLRQV 5RRP 7HPSHUDWXUH 5H K & * RU K ; 5 < 9

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3DFNDJLQJ  
- \ ;>û  
7DSH DQG 5HHO 3DFNDJLQJ



- \ ;>û  
\$ PPR 3DFNDJLQJ



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+9* :XÃ7; 6L]H &R	EÑ-%" W\$ PPR	"v-%" WÃ7DSH DQG 5HHO
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