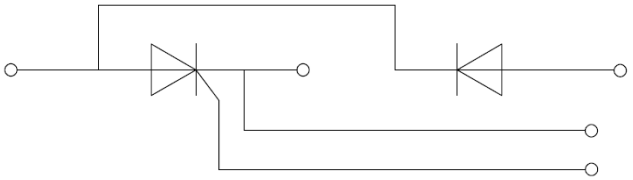
P_{LLG}	+0	P
$_{NP}$: $N_{=}$ 7 2/ ℃	++	
$_{NMG}$: n_{J} 7 + g m	, , /	
P_{N} G r	+(2	P

B f lc a i h ca ol nc h q cb dn al n M=L h
ic dn mdhaf j e a
Bcab nb lg f i h o npcs = dnmof nc h i l r ff hn
b n cmmj nc h
P oog mi f lcha n bhi fi as i l hb h l fc dcs

B ncha i hrli f
Fcabn i hrli f msmn g
= g i ri l





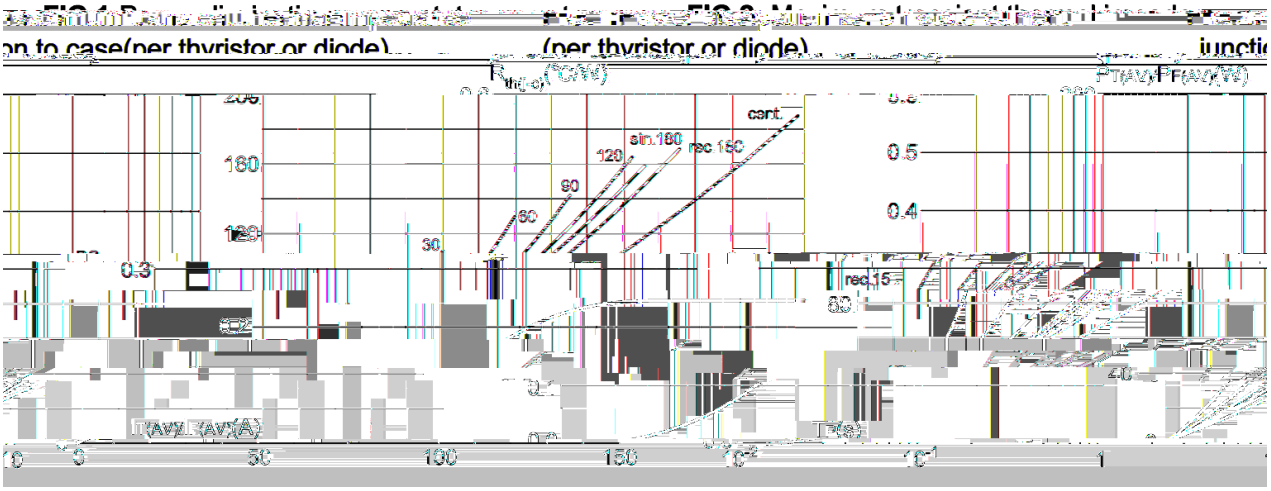
: $N_{=}$ 7 , / = ohf mmi nb lq cn mj cc

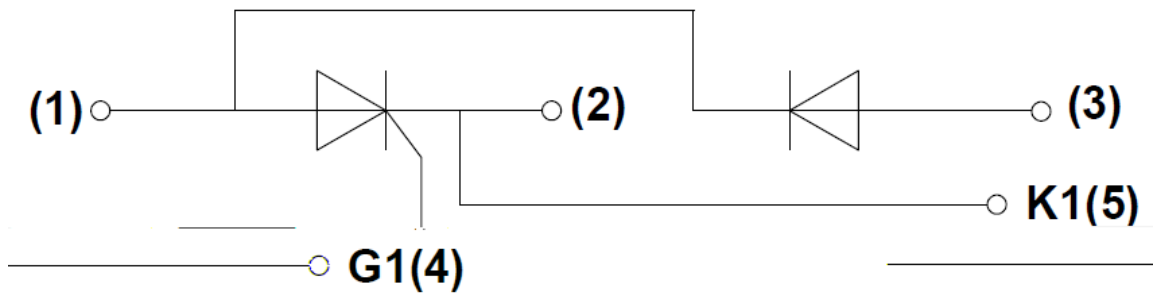
L j ncp j e i mn n pi fn a	Npd7 , / =	P_{LG}	+0	P
L j ncp j e l p lm pi fn a	Npd7 , / =	P_{LLG}	+0	P
Hi h l j ncp j e i mn n pi fn a	Npd7 , / =	P_{MG}	+1	P
Hi h l j ncp j e l p lm pi fn a	Npd7 , / =	P_{LMG}	+1	P
p l a i lq l oll hn	$N_{=}$ 7 2/ =	$_{NP}$	++	
@lq l mola oll hn	+), s f Mdh q p / Bt Npd7 , / ℃	$_{NMG}$	, , /	
' np fo i l omcha		' n	, / - +	' m
=lcc fl n i lcn i i h mn n oll hn	$_{A}$7, $_{AN}$	) n	+/	) m
LGM cni f nc h pi fn a	(= / Bt +m)+g dn	P_{M}	- 0)-	P
Doh nc h n g j l nol l ha		N_{D}	. x +, /	℃
Mni l a n g j l nol l ha		N_{mma}	. x +, /	℃

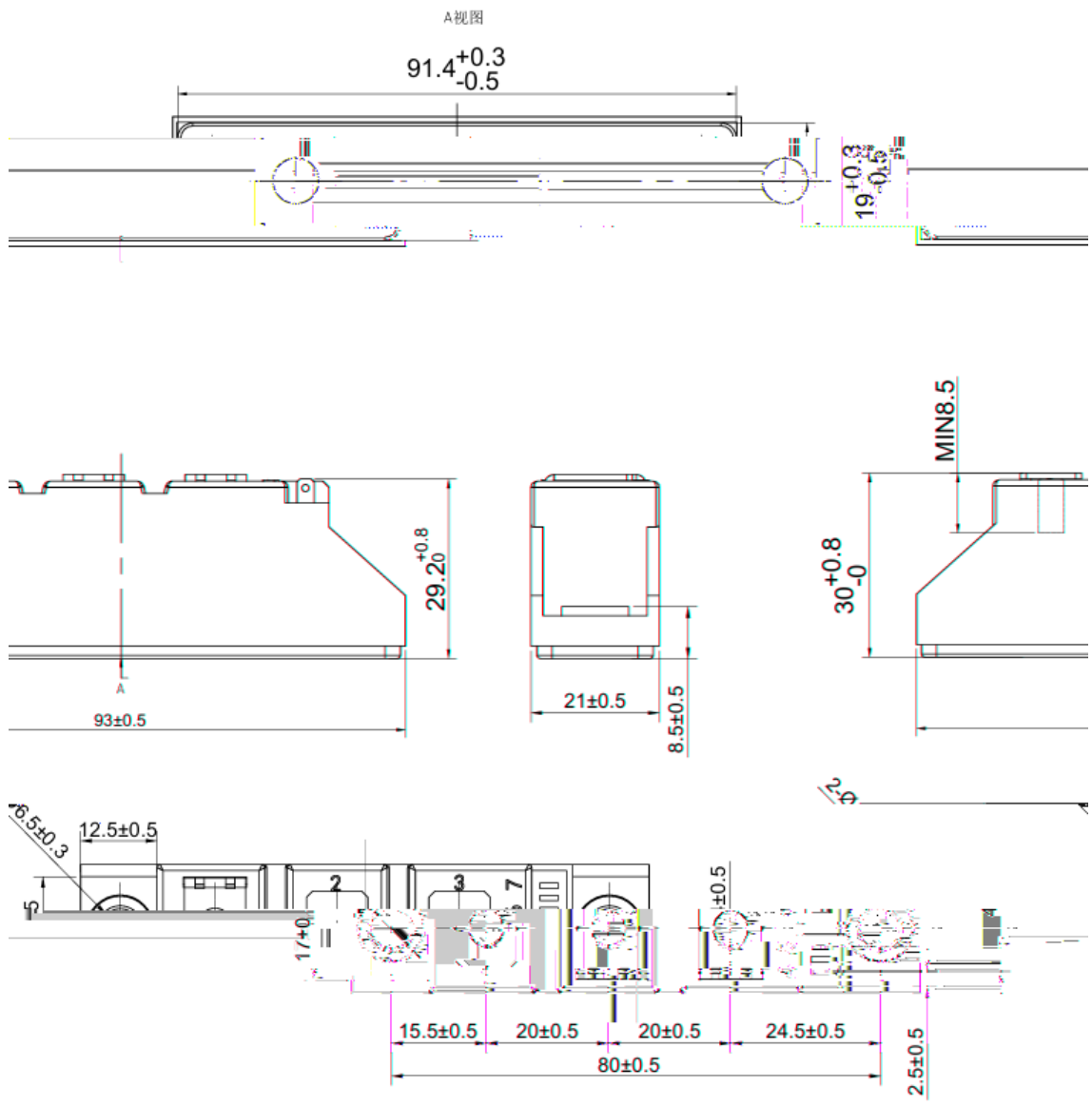
: N= 7 , / = ohf mmmi rb lq cn mj cc

J e i l q l p i f h a	N 7 - - n 7 - 2 m	P N			+ (2	P
L j m c p j e i m m n o l l h n	P 7 P L G N p d 7 , / ℃	L G			+	
	P 7 P L G N p d 7 + , / ℃				.	g
L p l m f e a o l l h n	P L 7 P L L G N p d 7 , / ℃	L L G			+	
	P L 7 P L L G N p d 7 + , / ℃				.	g
N b l m b i f p i f h a	@ l j i q l f i m m f o f m c h i h f s N p d 7 + , / ℃	P N I			(2 2	P
s h g c l m c m m h	N p d 7 + , / ℃	I N			, (.	g
N l c a a l c h a a n o l l h n	P 7 + , P L F 7 -	A N	,		+ ,	g

DGN++ EB+0N+	DGN++ EB+0N+	N+	+ / a)J=M	+ J=M	+, J=M







Ohcni g mol g hn4g g

h i l g n c h o l h c m b c h r b c m i o g h n c m f c p n i o l n h l f c f (B i q p l
D c h a m o D c D c M g c i h o n i l = i (F n m m o g m h i l m j i h m c d c s i l r b i h m k o h m i o m
q c b i o n i h m c l n c h i l m o b c h i l g n c h h i l o m s i h c n (N b c m c h i l g n c h c h r b c m i o g h n
c m m o d n n i b h a q c b i o n j l c i l h i n c (H i n q c b m m h c h a r b c m D c h a m o D c D c q d f o f f s i g j f s
q c b r b n l g m i o n f c h c h m c a h a l g h n (J l i o m m h c h i l g n c h j l i p c c h r b c m
i o g h n b p h i c h l c h a g h n i j n h m m (D c h a m o D c D c m m o g m h i l m j i h m c d c s i l h s
c h l c h a g h n i i r b l l c a b m m i r b c l j l n c m q b c b g s l m o f n l i g r b o m i m o b j l i o m m h
c h i l g n c h (N b c m i o g h n c m r b c h c c f l f m n +. o a o m m , , 0 (N b c m i o g h n