

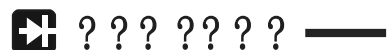
ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

3DUDPHWHU	\PERO6	9DOXH	8QLW
'UDLQ 6RXUFH9ROWDJH	9.66	650	V
&RQWLQXHV 'UDLQ &XUUHQW	7 F °C		\$
	7 F °C		
3OXVHG 'UDLQ&XUUHQW	,0		\$
*DWH WR 6RXUFH9ROWDJH	9.6	±	9
6LQJOH3XOVHG \$YDODQFKH (QHUJ)	(\$6		P-
\$YDODQFKH&XUUHQW	,\$5		\$
5HSHWLWLYH \$YDODQFKH (QHUJ)	(\$5		P-
3HDN 'LRGH 5HFRYHU\	GY GW		9 QV
3RZHU 'LVVLSDWLRQ 7 F °C	72 72		:
	72		
	72)		
3RZHU 'LVVLSDWLRQ 'HUDWLRQ)DFWRU \$ERYH	72 72		: °C
	72		
	72)		
2SHUDWLQJ DQG 6WRUDJH 7HPSHUDWXUH 5DQJH	72	, ~	°C
0D[LXP 7HPSHUDWXUH IRU 6ROGHU	72		°C

THERMAL CHARACTERISTIC

3DUDPHWHU	6\PERO	0D[8QLW
7KHUPDO 5HFRYHU\ 5WURXQJ 5WURXQJ	72 72		°C/W
	F 72		
	72)		
7KHUPDO 5HFRYHU\ 5WURXQJ 5WURXQJ	72 72		°C/W
	\$ 72		
	72)		

* 'UDLQ FXUUHQW OLPLWHG E\ PD[LXP MXQFWLRQ WHPSHUDWXUH



ELECTRICAL CHARACTERISTICS

Off-Characteristics						
3DUDPHWHU	6\PERO	7HVWV & RQGLV L RQV	0LQ	7V		
'UDLQ 6RXUFH %UHDNGRZQ 9ROWDJH	$V_{DS} = 0V$	650	-	-	9	
%UHDNGRZQ 9ROWDJH & RHIILFLHQW	$V_{DS} = 650V, V_{GS} = 0V$				9 °C	
=HUR *DWH 9ROWDJH 'UDLQ & XUHQW	$V_{DS} = 650V, V_{GS} = 0V$					\$
*DWH ERG\OHDNDJH FXUUHQW IRUZDUG	$V_{DS} = 520V, T_c = 25 °C$				9	Q\$
*DWH ERG\OHDNDJH FXUUHQW UHYHUVH	$V_{DS} = 520V, T_c = 25 °C$				9	Q\$

On-Characteristics						
3DUDPHWHU	6\PERO	7HVWV & RQGLV L RQV	0LQ	7V		
*DWH 7KUHVKROG 9ROWDJH	$V_{GS} = 0V$				9	\$
6WDWLF 'UDLQ 6RXUFH 2Q 5HVLVWDQFH	$V_{GS} = 0V$					\$
)RUZDUG 7UDQVFRQGXFWDQFH	$V_{GS} = 0V$				9	\$ QRWH

Dynamic Characteristics						
3DUDPHWHU	6\PERO	7HVWV & RQGLV L RQV	0LQ	7\SH		
,QSXFDSDFLWDQFH	$V_{GS} = 0V$					S)
2XWSXFDSDFLWDQFH	$V_{GS} = 0V$					0+=
5HYHUVH WUDQVIHUFSDFLWDQFH	$V_{GS} = 0V$					

Switching Characteristics

3DUDPHWHU	6\PERO	7HVWV&RQGLV'L RQV	0LQ
7XUQ 2Q GHOD\WLP RQ	W		
7XUQ 2Q ULVH WLP H	W 9 9 \$ 5		
7XUQ 2II GHOD\WLP RII	W QR.WH		QV
7XUQ 2II)DOO WLP I	W		
7RWDO *DWH &KDUJH	4J		
*DWH 6RXUFHFKDUJH	9 ₆ = 520V, 4J \$ 9 ₆ 9 QR.WH		- Q&
*DWH 'UDLQFKDUJH	4JG		- Q&

Drain-Source Diode Characteristics and Maximum Ratings

3DUDPHWHU	6\PERO	7HVWV&RQGLV'L RQV	0LQ
0D[LPXP &RQWLQXRXV 'UDLQ 6RXUFH 'LRGH)RUZDUG &XUUHQW	6		
0D[LPXP 3XOVHG 'UDLQ 6RXUFH 'LRGH)RUZDUG &XUUHQW	60		
'UDLQ 6RXUFH 'LRGH)RUZDUG 9ROWDJH	9 ₆ 9 ₆ \$		9
5HYHUVH UHFVRYHU\WLP H	9 ₆ 9 ₆ \$		
5HYHUVH UHFVRYHU\FKDUJH	G, GW \$ V QRWH		

1RWHV
: 3XOVH ZLGWK OLPLWHG E\ PD[LPXP MXQFWLRQ WHPSHUDWXUH
: / P + s = \$ 9 = 9 5 = 6WDUW LQJ 7
: , 6 ≤ \$ G ≤ GW \$ V = % 9₆ 6 WD U W L Q J 7
: 3XOVH 7HVW 3XOVH : LGWK & FOH
: (VHQWLDQO\LQGSHQGHW RIRSHUDWLQJ WHPSHUDWXUH

RATING AND CHARACTERISTICS CURVES (RMP6N65 LD(IP)(TI)(T2))

)LJ 2Q 6WDWH &KDUDFWHULVWLFV

)LJ 7UDQV

)LJ %UHDNGRZQ 9ROWDJH 9DULDWLRQ YV 7HPSWUBW XVHHP SHUDZV

)LJ &DSDFLWDQFH &KDUDFWHULVWLFV

)LJ *DWH

RATING AND CHARACTERISTICS CURVES (RMP6N65 LD(IP)(TI)(T2))

) L J 0 D [L P X P 6 D I H 2 S H U D W L Q J \$ U H D

) L J 0 D [L P X P 6 D I H 2 S H U D W L Q J \$ U H D & X U

) L J Transient Thermal Response Curve (TO-251/TO-252)

) L J Transient Thermal Response Curve (TO-220/TO-262)

) L J Transient Thermal Response Curve (TO-220F)

TEST CIRCUITS AND WAVEFORMS

)LJ 5HVLVWLYH 6ZLWFKLQJ 7HVW &LUFXLW :DYHIRUP

)LJ *DWH &KDUJH 7HVW &LUFXLW :DYHIRUP

)LJ 8QFODPSHG ,QGXFVWLYH 6ZLWFKLQJ 7HVW &LUFXLW :

PACKAGE MECHANICAL DATA

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