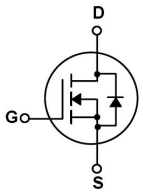
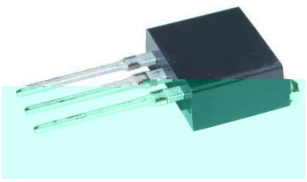
TO-262 N MOS N-CHANNEL MOSFET in a TO-262 Plastic Package..

Low gate charge, low crss, fast switching.

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.



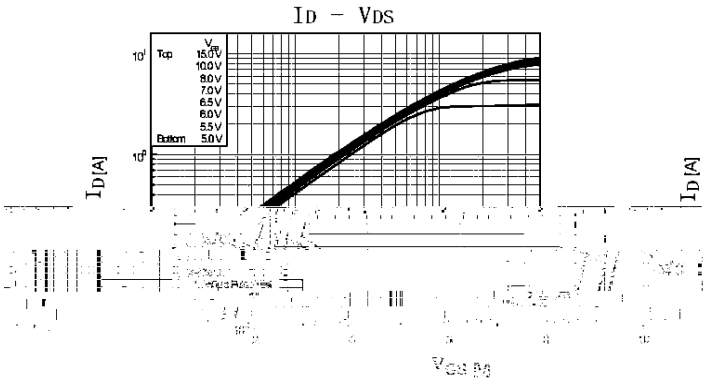


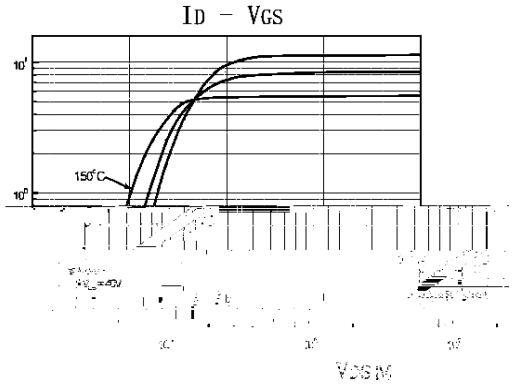
PIN1 G PIN 2 D PIN 3 S

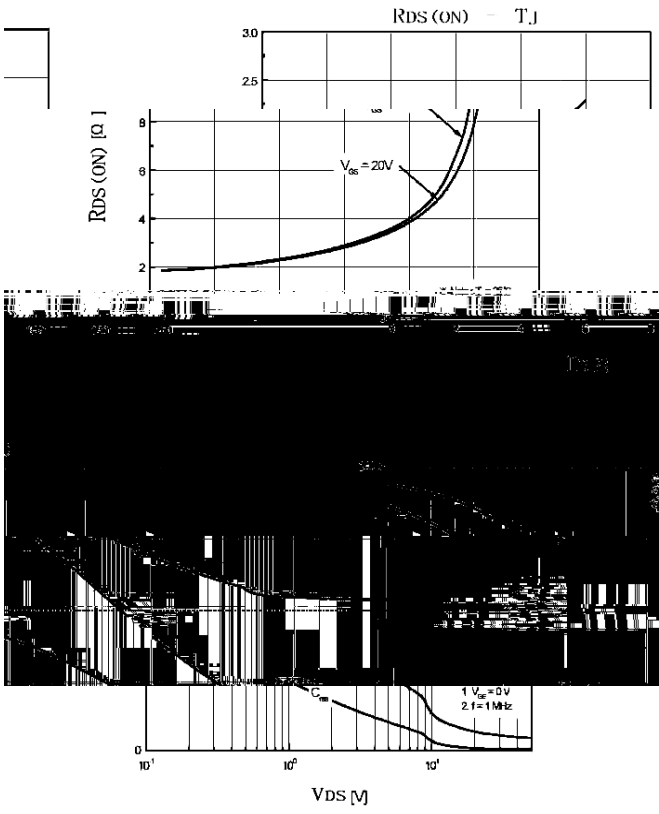
See Marking Instructions.

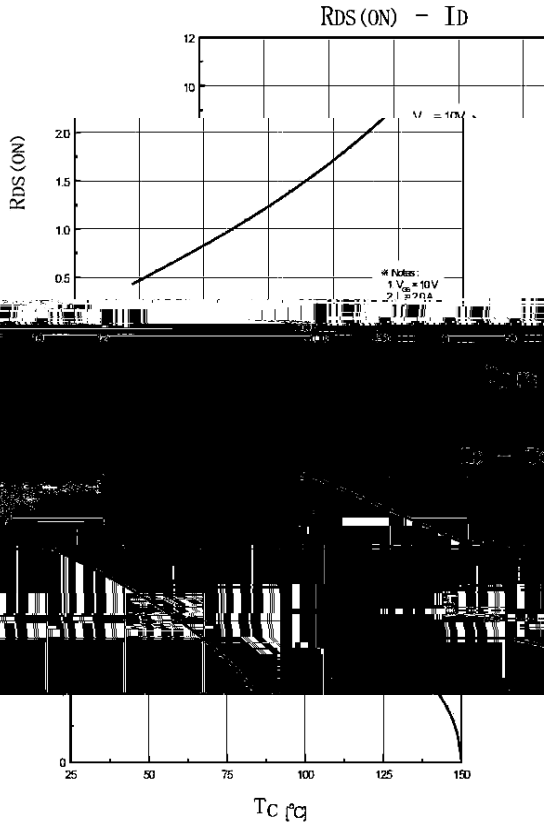
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	650	V
Drain Current	I_D(Tc=25℃)	4.0	A
Drain Current	I_D(Tc=100℃)	2.5	A
Drain Current - Pulsed	I_{DM}	16	A
Gate-Source Voltage	V_{GSS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	240	mJ
Repetitive Avalanche Energy	E_{AR}	10	mJ
Avalanche Current	I_{AR}	4.0	A
Power Dissipation	P_D(Tc=25℃)	50	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	

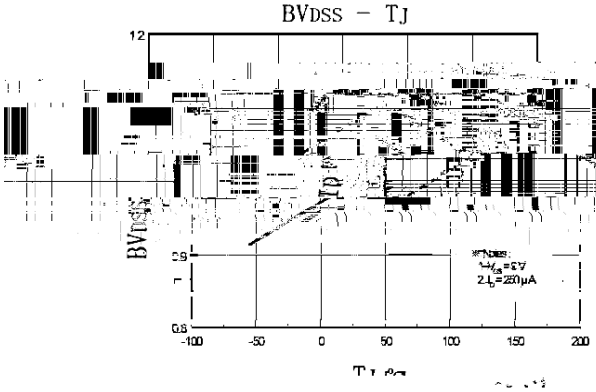
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250 A	650			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=650V V_{GS}=0V			1	A
		V_{DS}=480V T_C=125℃			100	A
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±30V V_{DS}=0V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250 A	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=2.0A			2.7	
Forward Transconductance	g_{FS}	V_{DS}=40V I_D=2.0A		4.7		S
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_S=4.0A			1.4	V
Input Capacitance	C_{iss}	V_{DS}=25V V_{GS}=0V f=1.0MHz		545	710	pF
Output Capacitance	C_{oss}			60	80	pF
Reverse Transfer Capacitance	C_{rss}			8	11	pF
Turn-On Delay Time	$t_{d(on)}$	V_{DD}=300V I_D=4.0A R_G=25		10	30	ns
Turn-On Rise Time	t_r			35	80	ns
Turn-Off Delay Time	$t_{d(off)}$			45	100	ns
Turn-Off Fall Time	t_f			40	90	ns

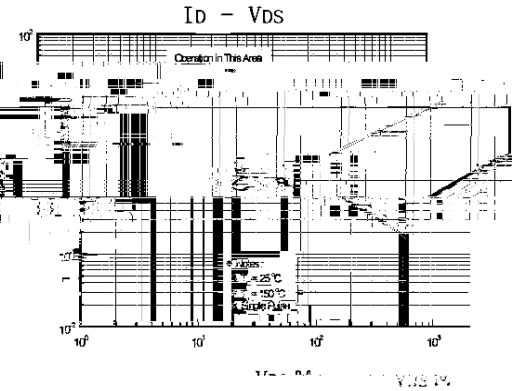

ID – VDS
Top
Bottom
15.0V
10.0V
8.0V
7.0V
6.5V
6.0V
5.5V
5.0V
ID [A]
VDS [V]

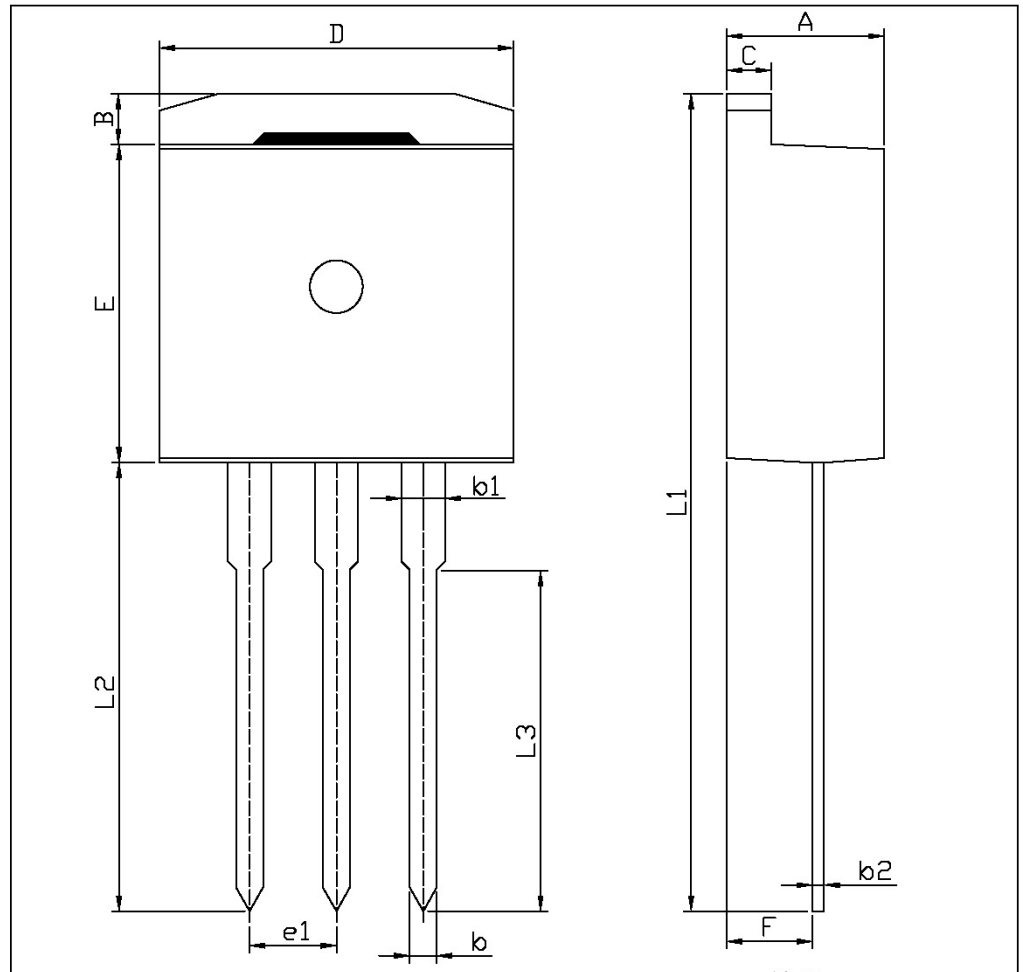

ID – VGS
150°C
ID [A]
VGS [V]


RDS(ON) – TJ
RDS(ON) [Ω]
Vgs = 20V
Ciss
1 Vgs = 0 V
2 f = 1 MHz
VDS [V]


RDS(ON) – ID
RDS(ON)
* Notes:
1 Vgs = 10V
TC [°C]


BVDSS – TJ
BVDSS
* Notes:
1 Vgs = 0 V
2 ID = 250 μA


ID – VDS
Operation in This Area
* Notes:
1 TC = 25°C
2 TJ = 150°C
3 Single Pulse



单位：mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.30	4.70	E	9.00	9.40
B	1.00	1.40	e1	2.34	2.74
b	0.70	0.90	F	2.20	2.60
b1	1.27		L1	22.60	23.60
b2	0.40	0.60	L2	12.60	13.60
C	1.20	1.40	L3	9.60	10.60
D	9.80	10.20			

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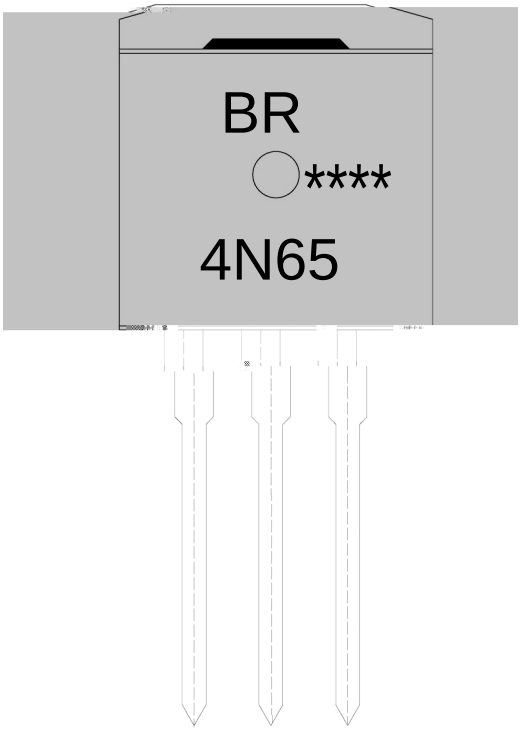
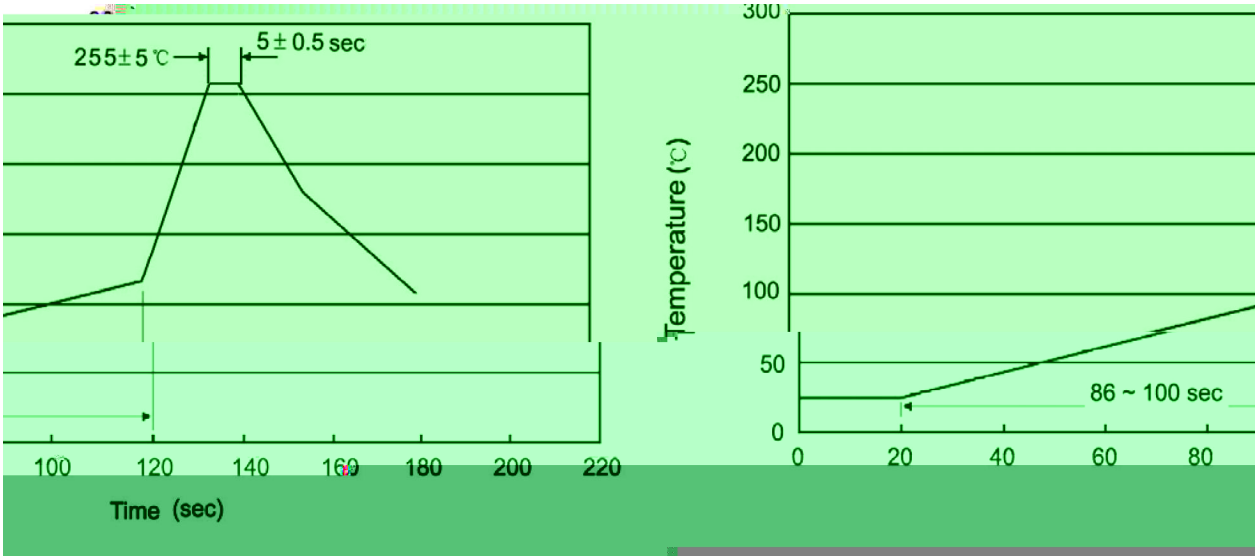


Note:

BR:	Company Code
4N65:	Product Type.
****:	Lot No. Code, code change with Lot No.



Note:

1 25 150 60 90sec;

1.Preheating:25~150 , Time:60~90sec.

2 255 5 5 0.5sec;

2.Peak Temp.:255 5 , Duration:5 0.5sec.

3 2 10 /sec.

3. Cooling Speed: 2~10 /sec.

270 5 10 1 sec. Temp.:270±5 Time:10±1 sec

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-262	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180