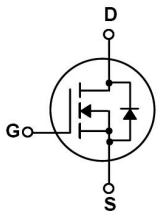
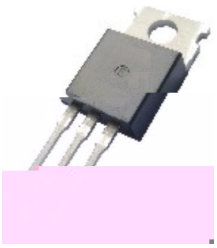
TO-220 N MOS N-CHANNEL MOSFET in a TO-220 Plastic Package.

Low gate charge, Low Crss , Fast switching.

DC/DC

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

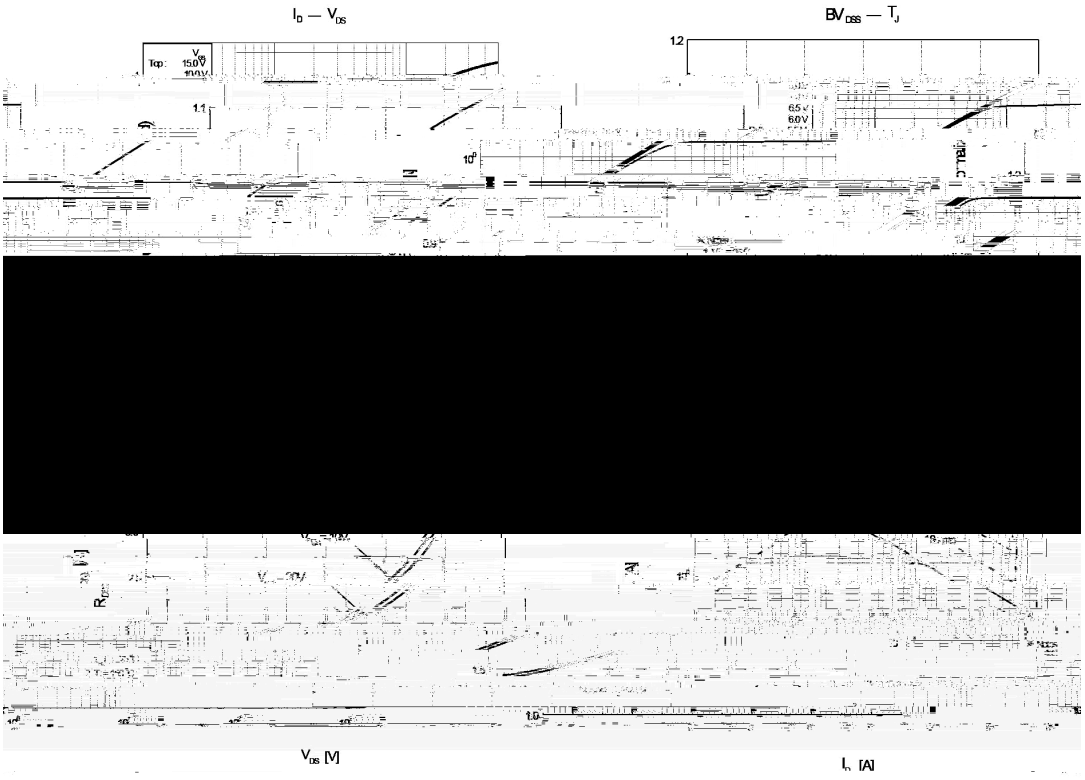


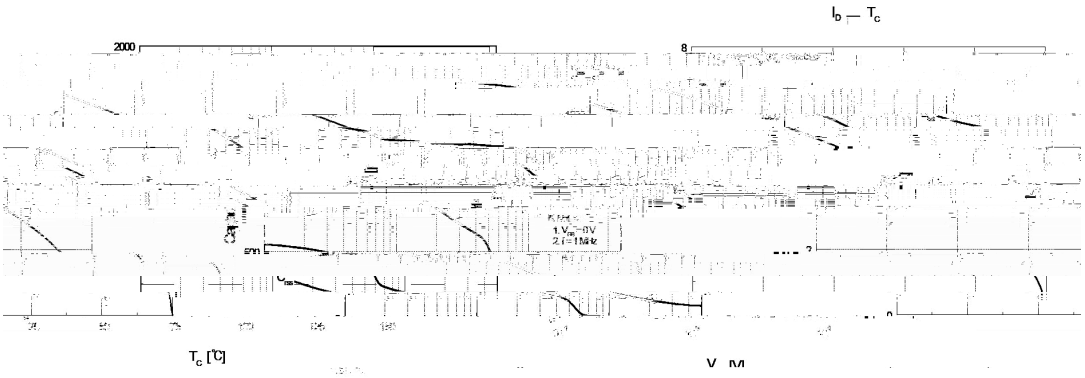


PIN1 G PIN 2 D PIN 3 S

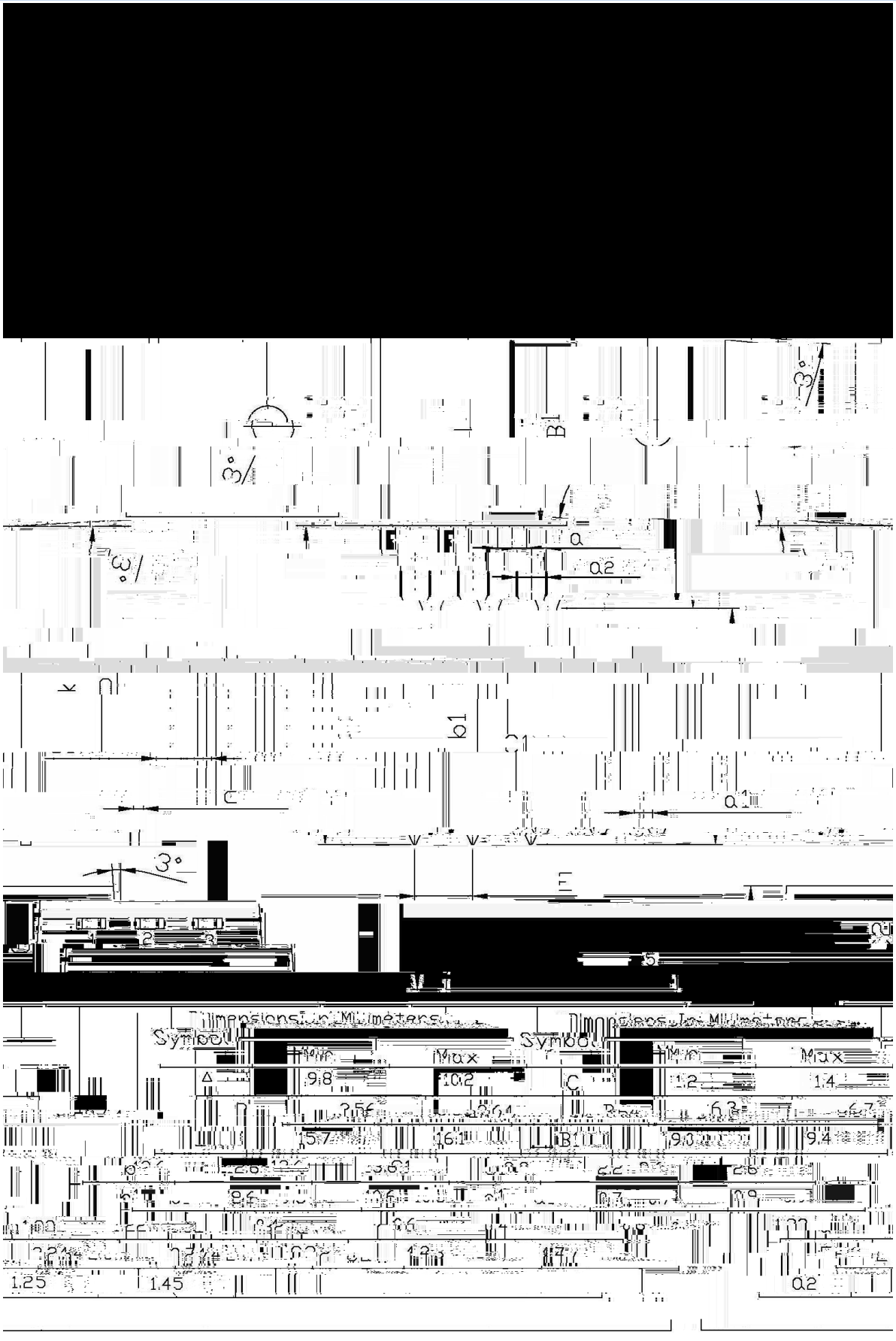
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	800	V
Drain Current	I_D(Tc=25)	7.0	A
Drain Current	I_D(Tc=100)	4.2	A
Drain Current - Pulsed	I_{DM}	26.4	A
Gate-Source Voltage	V_{GS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	580	mJ
Repetitive Avalanche Energy	E_{AR}	16.7	mJ
Avalanche Current	I_{AR}	6.6	A
Power Dissipation	P_D(Tc=25)	56	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	

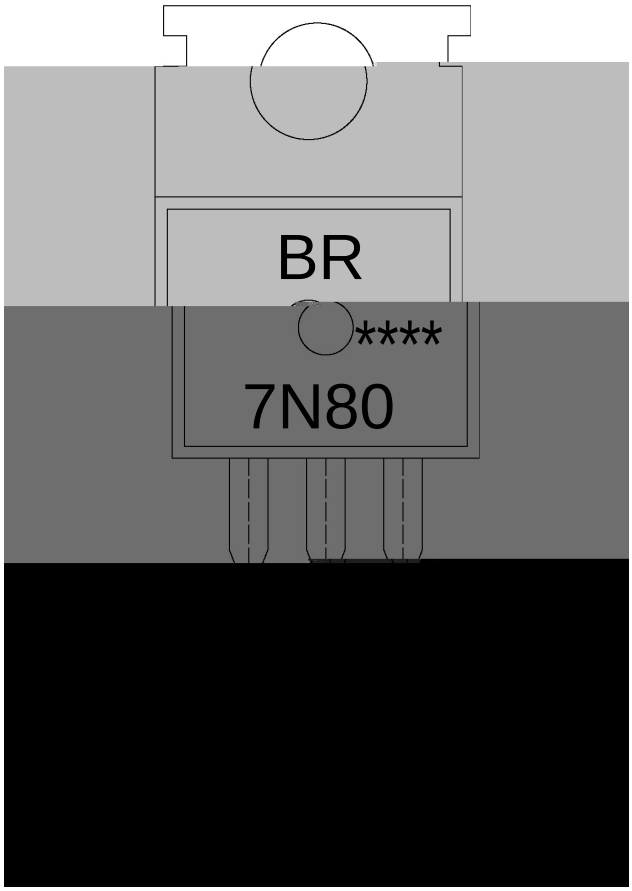
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250 A	800			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=800V V_{GS}=0V			10	A
		V_{DS}=640V T_C=125			100	A
Gate-Body Leakage Current, Forward	I_{GSS}	V_{GS}=±30V V_{DS}=0V			±0.1	A
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250 A	3.0		5.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=3.3A		1.57	1.9	
Forward Transconductance	g_{FS}	V_{DS}=50V I_D=3.3A		5.5		S
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_S=7.0A			1.4	V
Input Capacitance	C_{iss}	V_{DS}=25V V_{GS}=0V f=1.0MHz		1290	1680	pF
Output Capacitance	C_{oss}			120	155	pF
Reverse Transfer Capacitance	C_{rss}			10	13	pF
Turn-On Delay Time	$t_{d(on)}$	V_{DD}=400V I_D=6.6A R_G=25		35	80	ns
Turn-On Rise Time	t_r			100	210	ns
Turn-Off Delay Time	$t_{d(off)}$			50	110	ns
Turn-Off Fall Time	t_f			60	130	ns


$I_D - V_{DS}$
$BV_{DSS} - T_J$
V_{DS} [V]
I_D [A]


$I_D - T_C$
T_C [℃]


$R_{DS(ON)} - T_J$
$I_D - V_{GS}$
V_{GS} [V]
T_J [℃]


Dimensions in Millimeters
Symbol
Min
Max
9.8
10.2
15.7
16.1
1.25
1.45



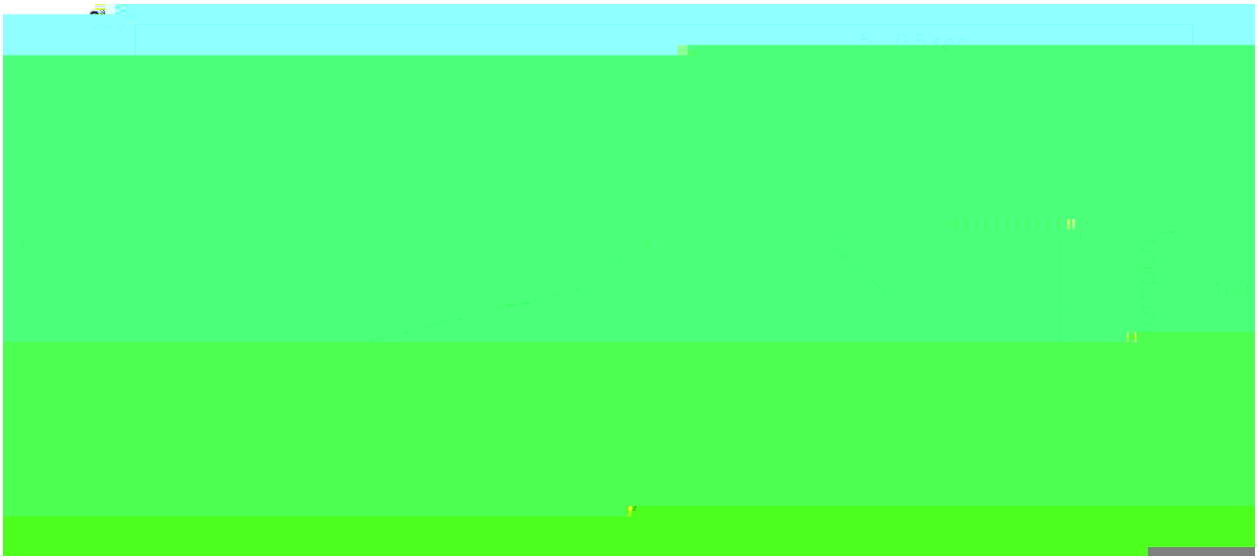
BR

7N80

****

Note:

BR:	Company Code
7N80:	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