TO-220 N

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

V_{DS}

Parameter	N Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	60	V
Drain Current	I_D(Tc=25)	225	A
Pulsed Drain Current	I_{DM}	646	A
Gate-Source Voltage	V_{GS}	±20	V
Single Pulsed Avalanche Energy L=0.5mH	E_{AS}	380	mJ
Avalanche Current	I_{AS}	30.8	A
Total Power Dissipation	P_D(Tc=25)	125	W

Avala

Parameter	N Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Q_g(10V)	V_{GS}=10V V_{DS}=30V I_D=20A		60		nC
Total Gate Charge	Q_g(4.5V)			23		
Gate Source Charge	Q_{gs}			16		
Gate Drain Charge	Q_{gd}			3		
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=10V V_{DS}=20V R_L=1Ω R_{GEN}=3Ω		13		ns
Turn-On Rise Time	t_r			4		
Turn-Off Delay Time	$t_{d(off)}$			47		
Turn-Off Fall Time	t_f			6.5		

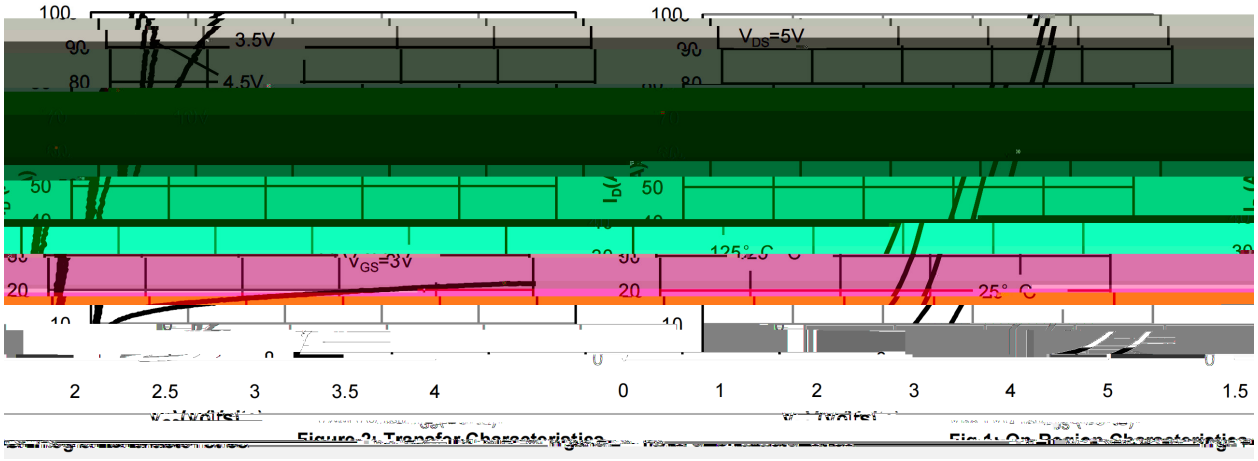
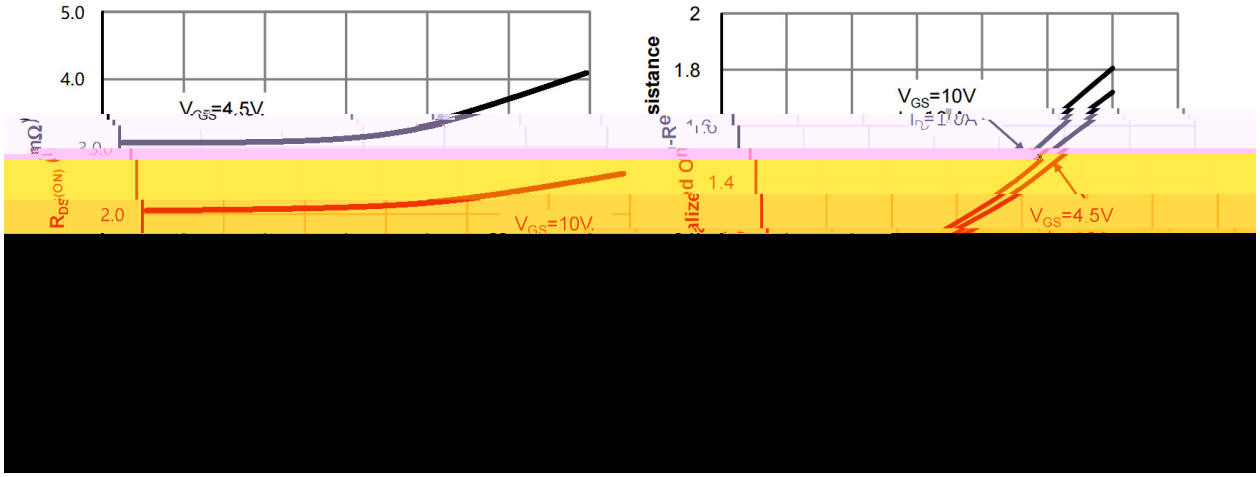


Figure 2: Transfer Characteristics

Fig 4: On-Region Characteristics



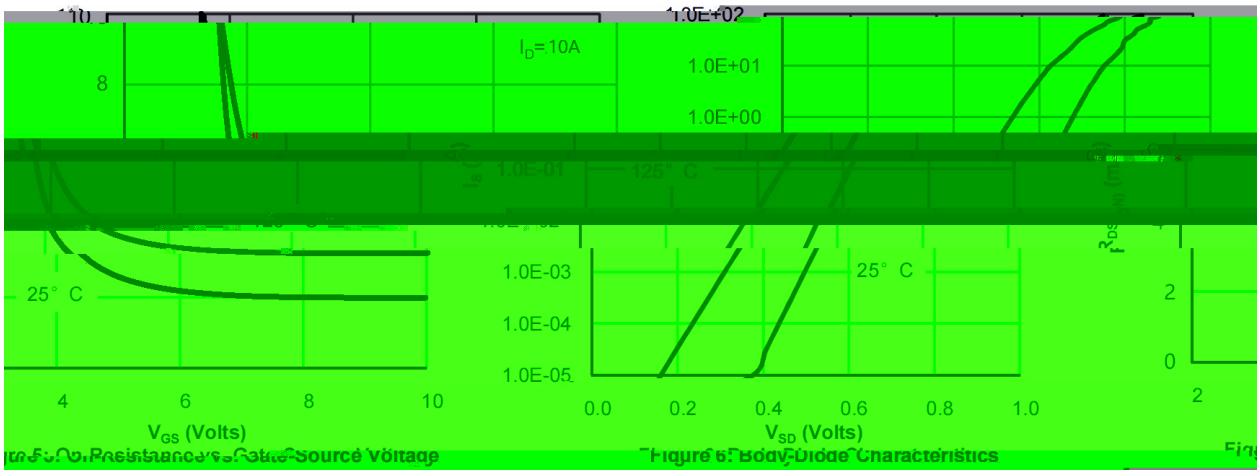
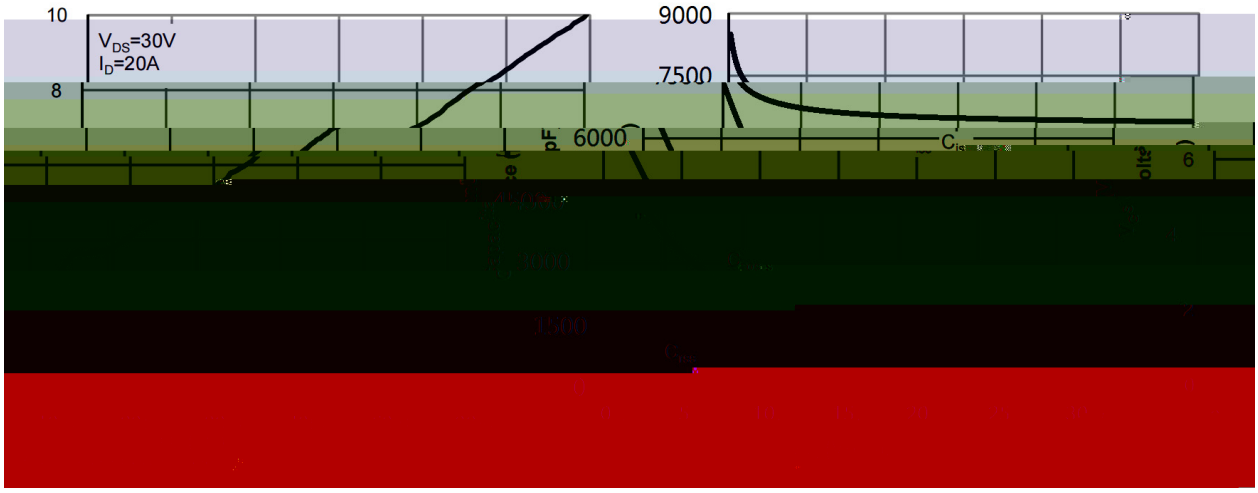
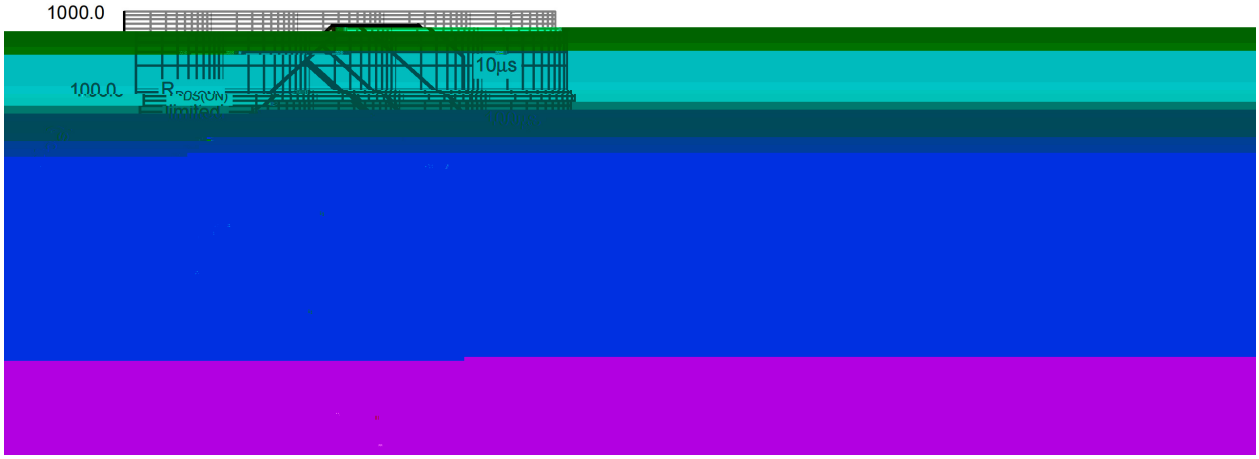
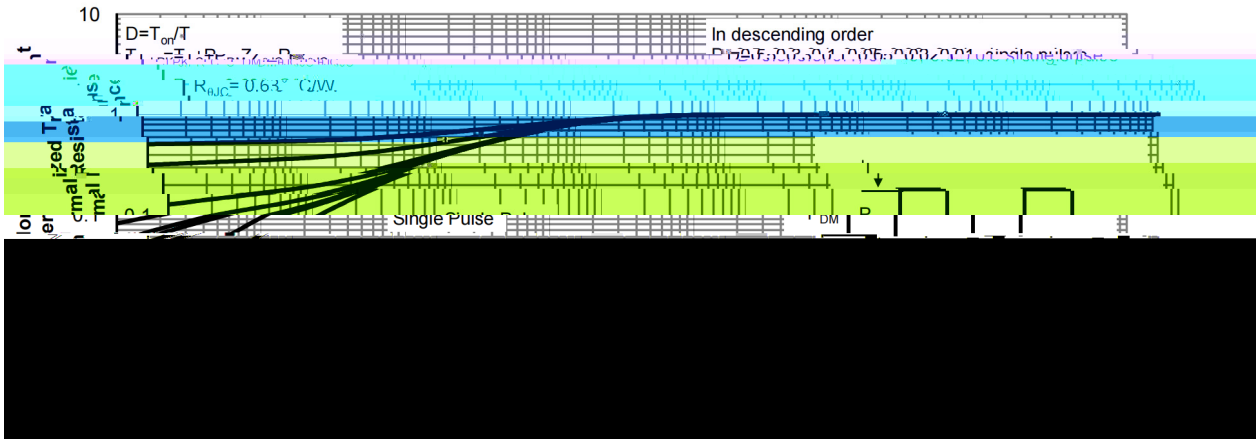


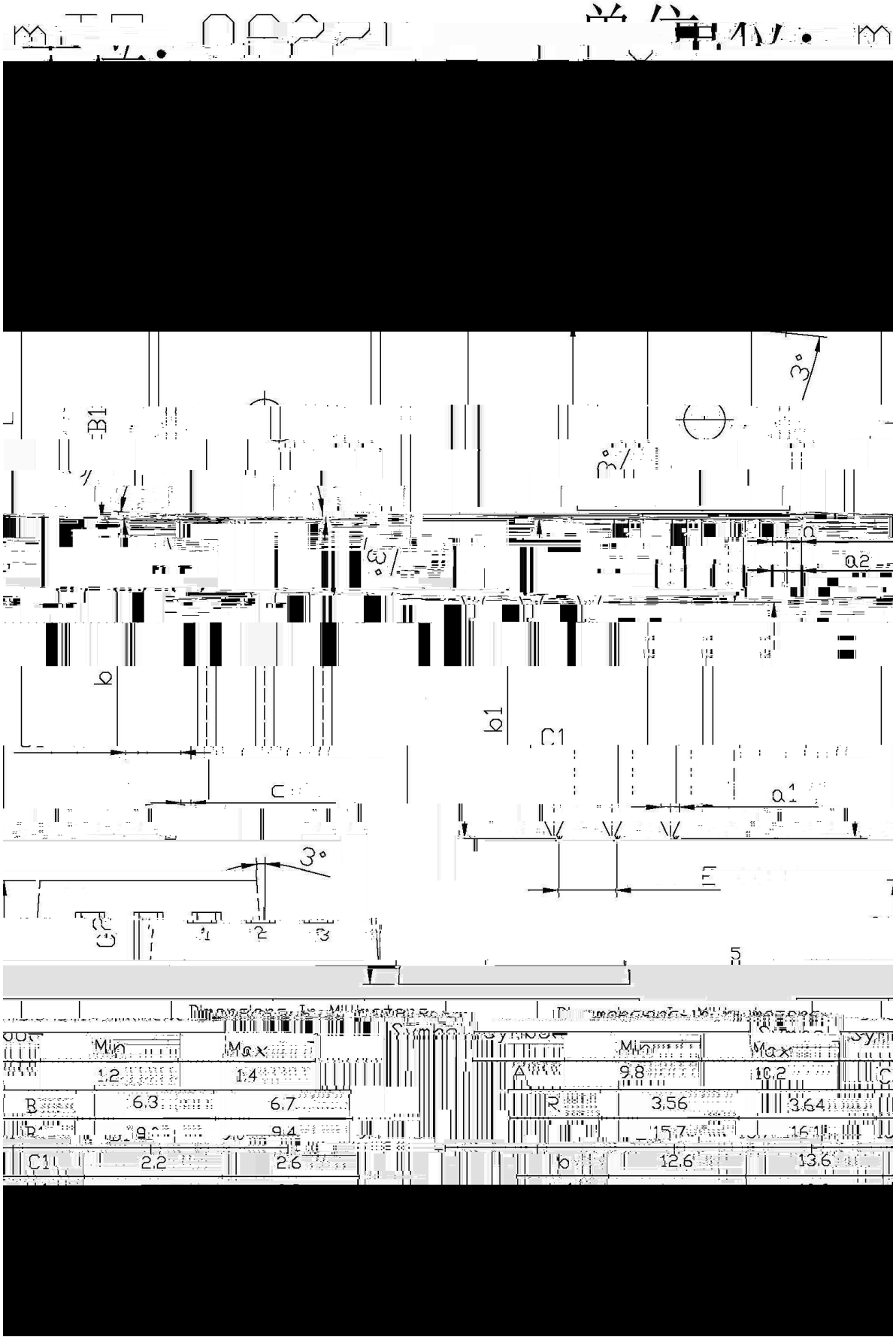
Figure 5: On-Resistance vs. Gate-Source Voltage

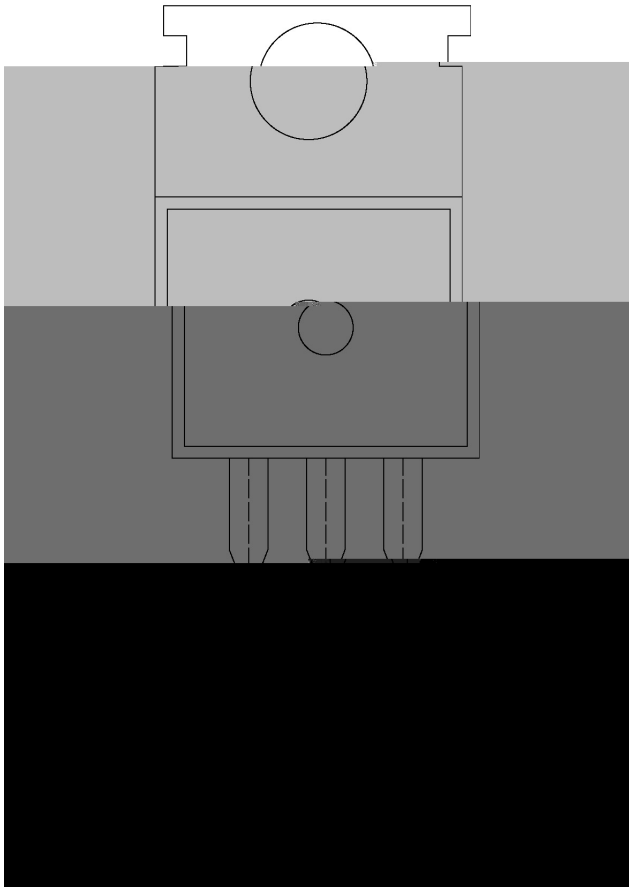
Figure 6: Body-Diode Characteristics


10
V_{DS}=30V
I_D=20A
8
9000
7500
6000
6


1000.0
10μs
100.0


10
D=T_{on}/T
In descending order
Single Pulse


B1
3°
3°
3°
a
a2
b
b1
C1
c
a1
3°
C2
1
2
3
5
Min
Max
Min
Max
1.2
1.4
9.8
10.2
B
6.3
6.7
R
3.56
3.64
15.7
16.1
C1
2.2
2.6
b
12.6
13.6



EU 版 И

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Note:

BR: Company Code

Note:

1 25 150 60 90sec;

2 255±5 5±0.5sec;

3 2 10

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

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