Parameter	Symbol	Rating	Unit
Drain Source Voltage	V_{DSS}	500	V
Gate-Source Voltage	V_{GSS}	±30	V
Drain Continuous- Current	I_D(Tc=25)	26(Note 1)	A
Drain Current Pulsed(Note 2)	I_{DM}	104(Note 1)	A
Avalanche Current(Note 2)	I_{AR}	26	A
Single Pulse Avalanche Energy	E_{AS}	1100	mJ
Repetitive Avalanche Energy	E_{AR}	29	mJ
Peak Diode Recovery dv/dt	dv/dt	15	V/ns
Power Dissipation	P_D(Tc=25)	290	W
	Derate above 25	2.33	W/
Junction Temperature	T_J	+150	
Storage Temperature	T_{STG}	-55~+150	℃

1.

2.

Note:

1. Drain current limited by maximum junction temperature.
2. Repetitive Rating: Pulse width limited by maximum junction temperature.

Parameter	Symbol	Rating	Unit
Junction to Ambient	$R_{\theta JA}$	40	°C/W
Junction to Case	$R_{\theta JC}$	0.45	°C/W

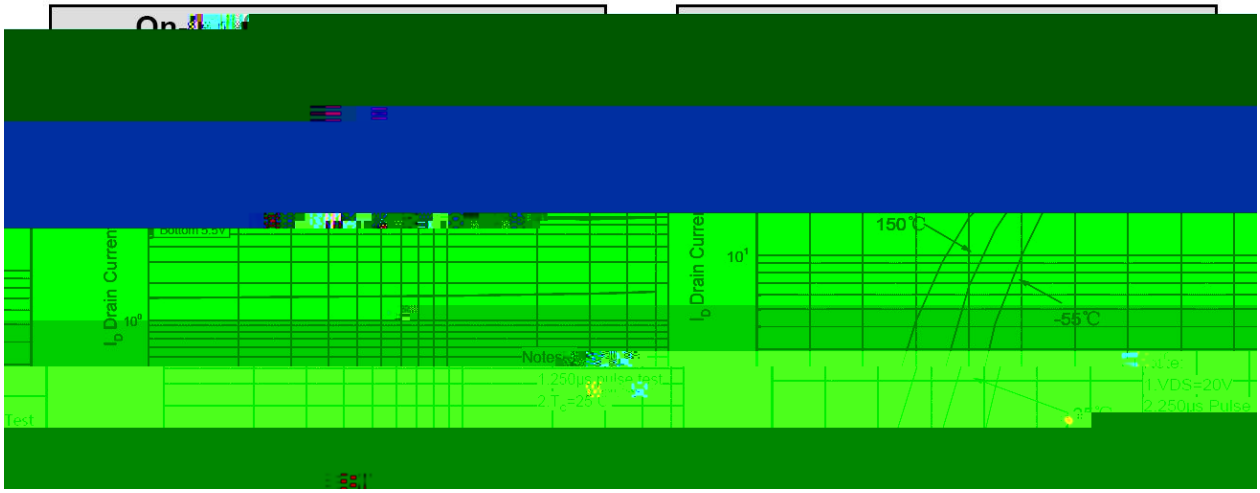
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250μA	500			V
Drain-Source Leakage Current	I_{DSS}	V_{DS}=500V V_{GS}=0V			50	μA
Gate- Source Leakage Current Forward	I_{GSSF}	V_{DS}=0V V_{GS}=+30V			+100	nA
Gate-Source Leakage Current Reverse	I_{GSSR}	V_{DS}=0V V_{GS}=-30V			-100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}= V_{GS} I_D=250μA	3.0		5.0	V
Static Drain-Source On-State Resistance	$R_{DS(ON)}$	V_{GS} =10V I_D=13A		0.15	0.24	Ω
Input Capacitance	C_{iss}	V_{DS}=25V V_{GS} =0V, f=1.0MHZ		3500	4500	pF
Output Capacitance	C_{oss}			520	670	
Reverse Transfer Capacitance	C_{rss}			55	70	
Total Gate Charge	Q_G	V_{GS}=10V V_{DS}=400V I_D=26A (Note 1, 2)		81	120	nC
Gate to Source Charge	Q_{GS}			23		
Gate to Drain Charge	Q_{GD}			35		
Turn-ON Delay Time	$t_{D(ON)}$	V_{DD}=250V I_D=26A R_G=25Ω (Note 1, 2)		80	170	ns
Rise Time	t_R			2500	500	
Turn-OFF Delay Time	$t_{D(OFF)}$			200	400	
Fall-Time	t_F			155	320	
Maximum Body-Diode Continuous Current	I_S				26	A
Maximum Body-Diode Pulsed Current	I_{SM}				104	A
Drain-Source Diode Forward Voltage	V_{SD}	I_S=26A V_{GS}=0V			1.4	V
Body Diode Reverse Recovery Time	T_{rr}	I_S=26A V_{GS}=0V dIF/dt=100A/μs (Note 1)		530		ns
Body Diode Reverse Recovery Charge	Q_{RR}			8.2		μC

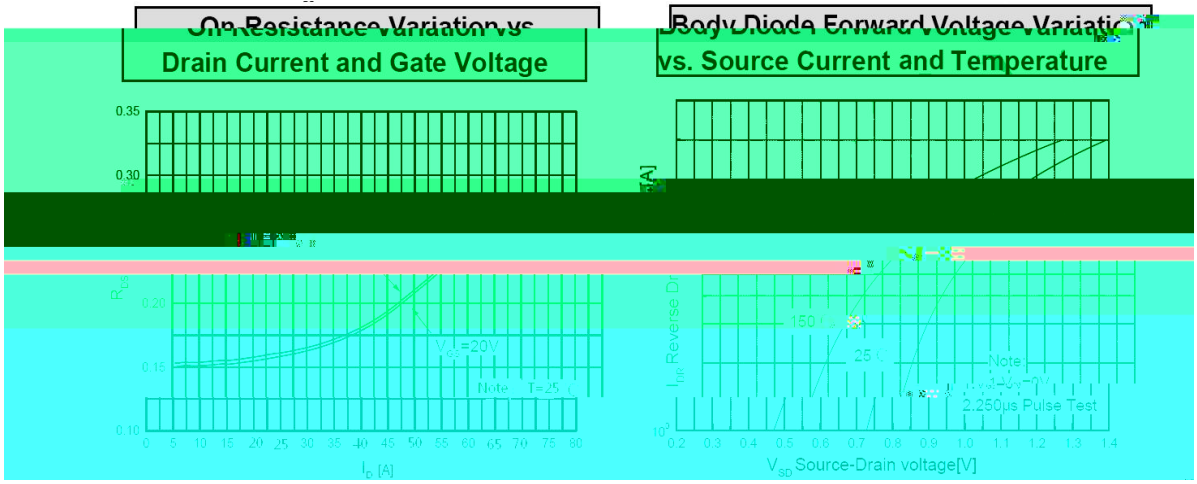
1. ≤300μs ≤2%

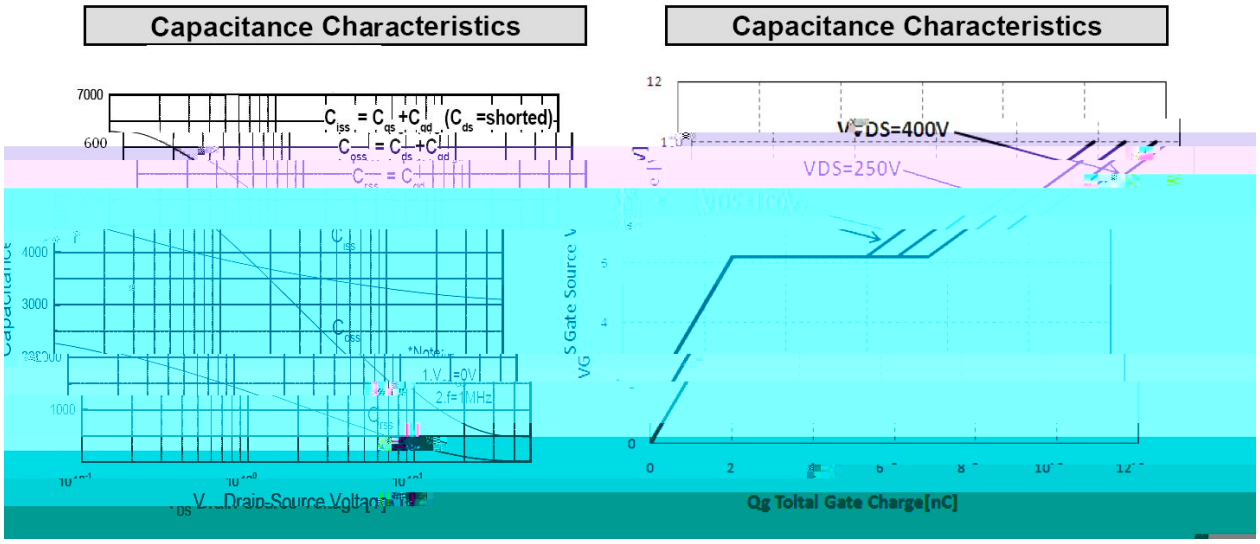
2.

Note:

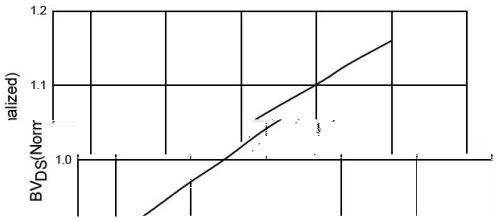
1. Pulse Test: Pulse width ≤ 300μs, Duty cycle ≤ 2%.
2. Essentially independent of operating temperature.



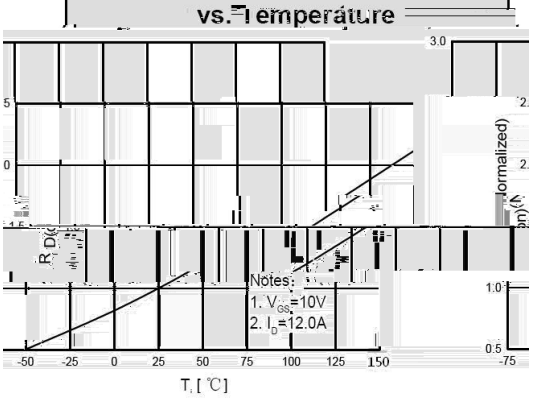

Drain Current and Gate Voltage
vs. Source Current and Temperature
0.35
0.30
0.20
0.15
0.10
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80
I_D [A]
V_{GS}=20V
Note T=25 ℃
150 ℃
25 ℃
Note
2.250μs Pulse Test
0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4
V_{SD} Source-Drain voltage[V]


Capacitance Characteristics
Capacitance Characteristics
7000
600
$C_{iss} = C_{gs} + C_{gd}$ (C_{ds} =shorted)
$C_{oss} = C_{ds} + C_{gd}$
$C_{rss} = C_{gd}$
4000
3000
1000
C_{iss}
C_{oss}
C_{rss}
*Note:
1.V_{GS}=0V
2.f=1MHz
V_{DS} Drain-Source Voltage[V]
12
V_{DS}=400V
VDS=250V
VDS=100V
VG Gate Source V
0
2
Qg Toltal Gate Charge[nC]

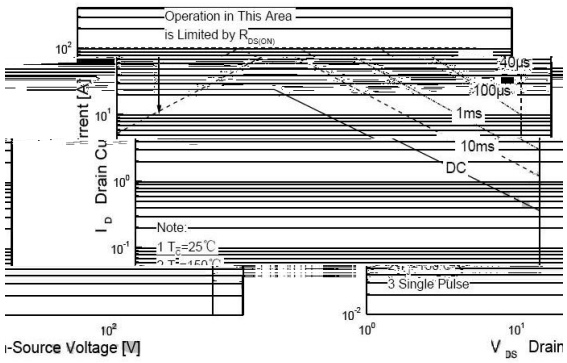
Breakdown Voltage Variation vs. Temperature



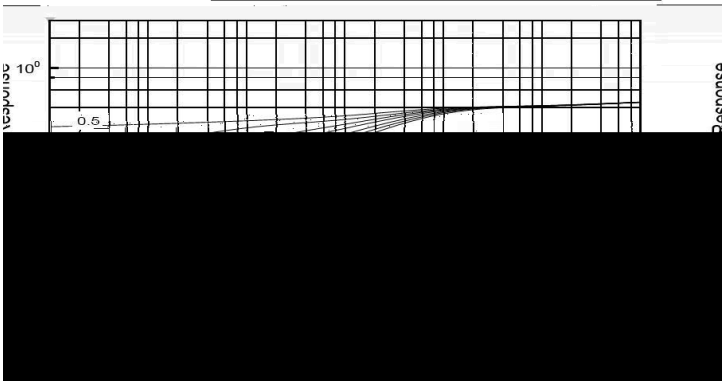
On-Resistance Variation vs. Temperature

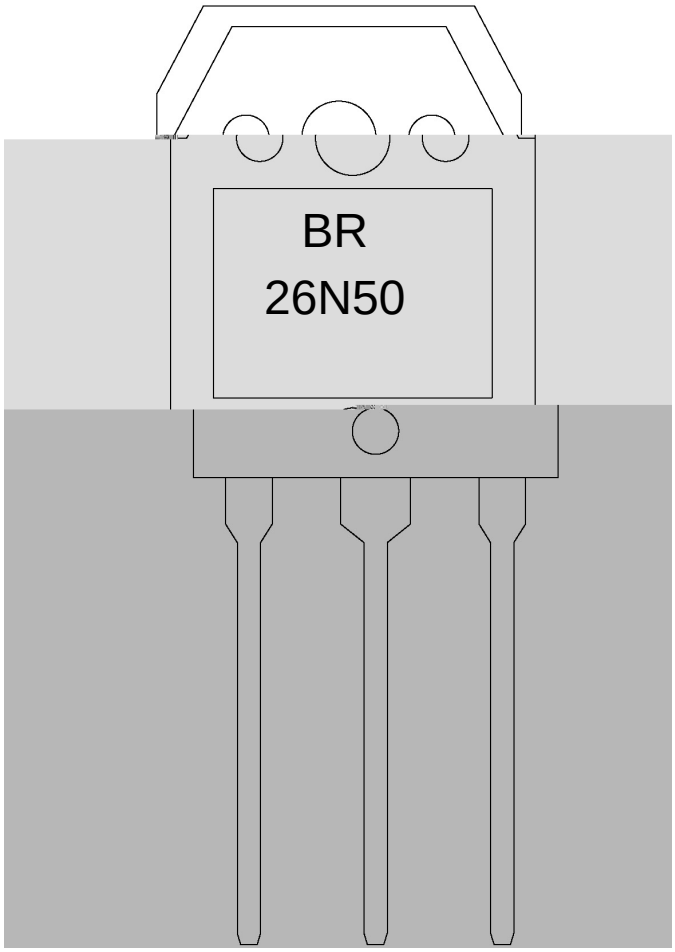


Maximum Safe Operating Area



Transient Thermal Response Curve





BR:

26N50

****

Note:

BR:	Company Code.
26N50:	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)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱
								× ×