查询2SJ476-01L供应商 捷多邦，专业PCB打样工厂，24小时加急出货

SPECIFICATION

DEVICE NAME : Power MOSFET

TYPE NAME : 2SJ476-01L,S

SPEC. NO. :

Fuji Electric Co.,Ltd.

This Specification is subject to change without notice.

	DATE	NAME	APPROVED		Fuji Electric Co.,Ltd.
DRAWN					

1.Scope This specifies Fuji Power MOSFET 2SJ476-01L,S

2.Construction P-Channel enhancement mode power MOSFET

3.Applications for Switching

4.Outview T-Pack L-Type : Outview See to 5/13 page
S-Type : Outview See to 6/13 page

5.Absolute Maximum Ratings at Tc=25℃ (unless otherwise specified)

Description	Symbol	Characteristics	Unit	Remarks
Drain-Source Voltage	V_{DS}	−60	V	
Continuous Drain Current	I_D	±25	A	
Pulsed Drain Current	I_{DP}	±100	A	
Gate-Source Voltage	V_{GS}	±20	V	
Maximum Avalanche Energy	E_{AV}	325.9	mJ	*1
Maximum Power Dissipation	P_D	50	W	
Operating and Storage	T_{ch}	150	℃	
Temperature range	T_{stg}	-55 to +150	℃	

*1 L=0.695mH,Vcc=-24V

6.Electrical Characteristics at Tc=25℃ (unless otherwise specified)

Static Ratings

Description	Symbol	Conditions		min.	typ.	max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-1mA V_{GS}=0V		-60			V
Gate Threshold Voltage	$V_{GS}(th)$	I_D=-1mA $V_{DS}=V_{GS}$		-1.0	-1.5	-2.5	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-60V	T_{ch}=25℃		-10	-500	μA
		V_{GS}=0V	T_{ch}=125℃		-0.2	-1.0	mA
Gate-Source Leakage Current	I_{GSS}	V_{GS}=±20V V_{DS}=0V			10	100	nA
Drain-Source On-State Resistance	$R_{DS}(on)$	I_D=-12.5A	V_{GS}=-4V		80	110	mΩ
			V_{GS}=-10V		45	60	mΩ

Dynamic Ratings

Description	Symbol	Conditions	min.	typ.	max.	Unit
Forward Transconductance	g_{fs}	I_D=-12.5A V_{DS}=-25V	7.5	15.0		S
Input Capacitance	Ciss	V_{DS}=-25V		2000	3000	pF
Output Capacitance	Coss	V_{GS}=0V		700	1050	
Reverse Transfer Capacitance	Crss	f=1MHz		450	680	
Turn-On Time	td(on)	V_{cc}=-30V		15	25	ns
	tr	V_{GS}=-10V		80	120	
Turn-Off Time	td(off)	I_D=-25A		190	290	
	tf	R_{GS}=10Ω		90	140	

Reverse Diode

Description	Symbol	Conditions	min.	typ.	max.	Unit
Avalanche Capability	I_{AV}	L=100μH Tch=25℃ See Fig.1 and Fig.2	-25			A
Diode Forward On-Voltage	V_{SD}	$I_F=2\times I_{DR}$ V_{GS}=0V T_{ch}=25℃		-2	-3	V
Reverse Recovery Time	trr	$I_F=I_{DR}$		160		ns
Reverse Recovery Charge	Qrr	di/dt=100A/μs T_{ch}=25℃		0.9		μc

7.Thermal Resistance

Description	Symbol	min.	typ.	max.	Unit
Channel to Case	Rth(ch-c)			2.50	℃/W
Channel to Ambient	Rth(ch-a)			75	℃/W

Fig.1 Test circuit

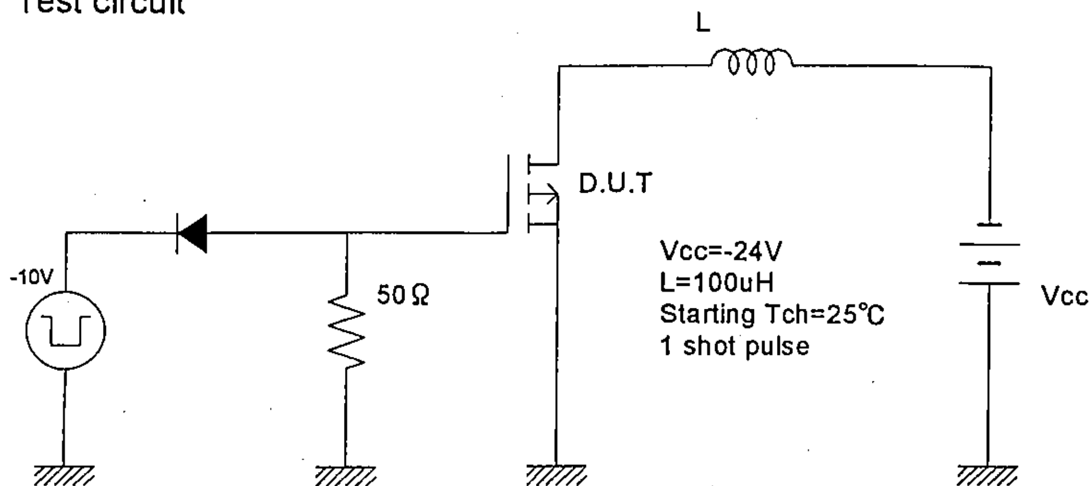
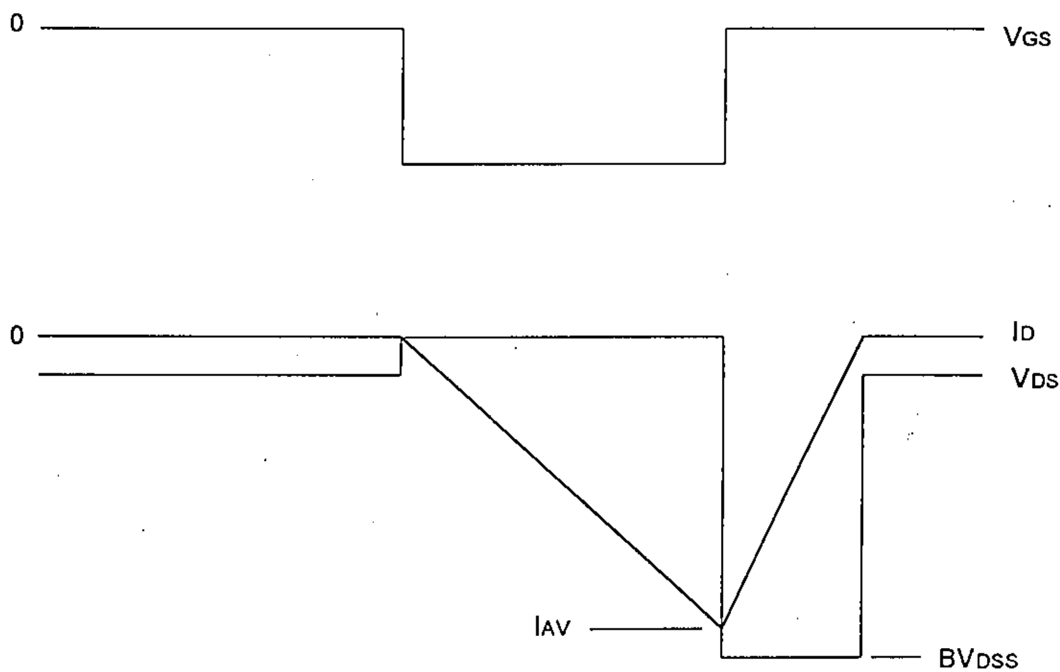
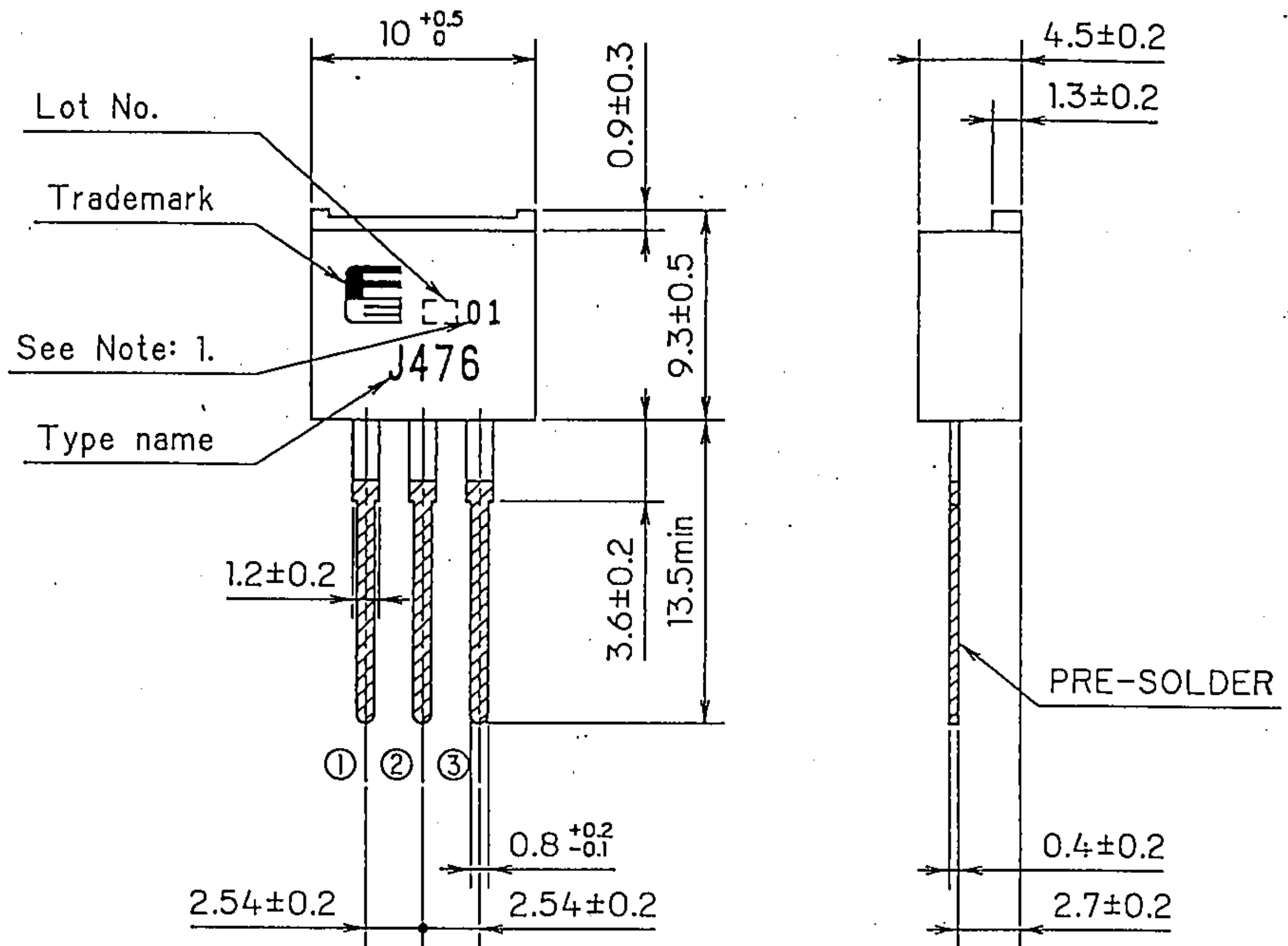


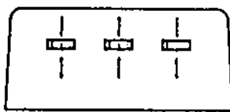
Fig.2 Operating waveforms



FUJI POWER MOS FET

TYPE : 2SJ476-01L





CONNECTION

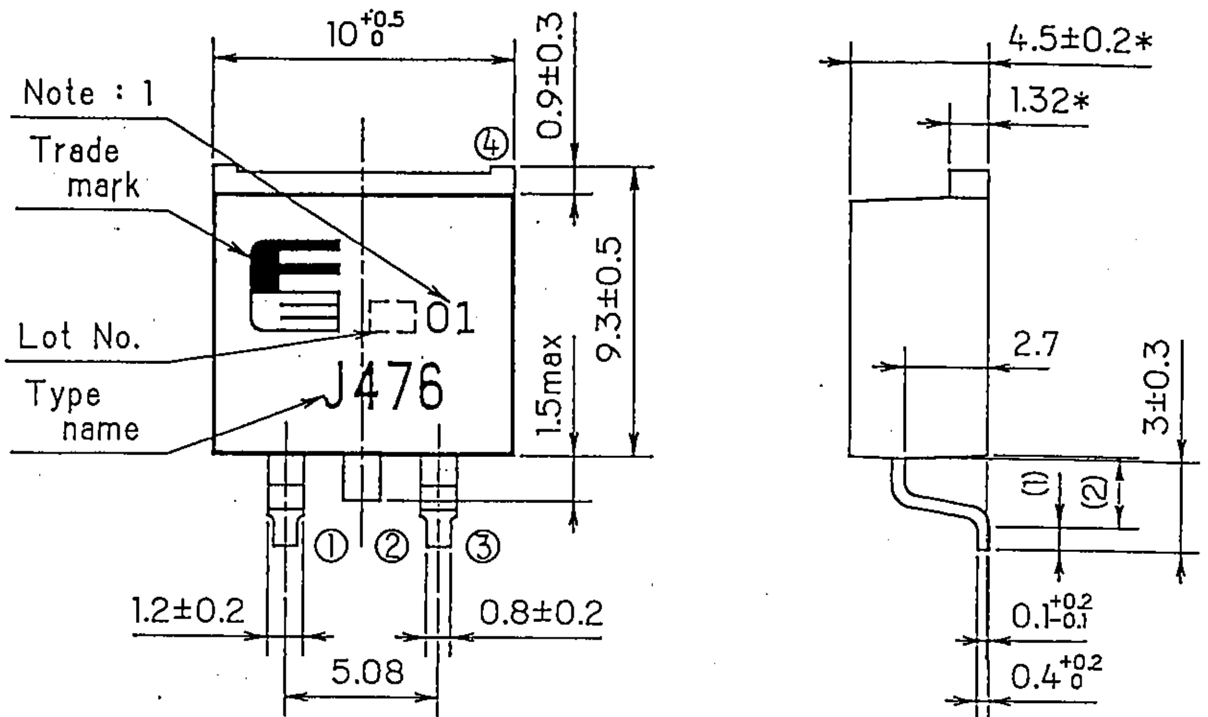
① GATE
② DRAIN
③ SOURCE

Note: 1. Guaranteed mark of avalanche ruggedness.

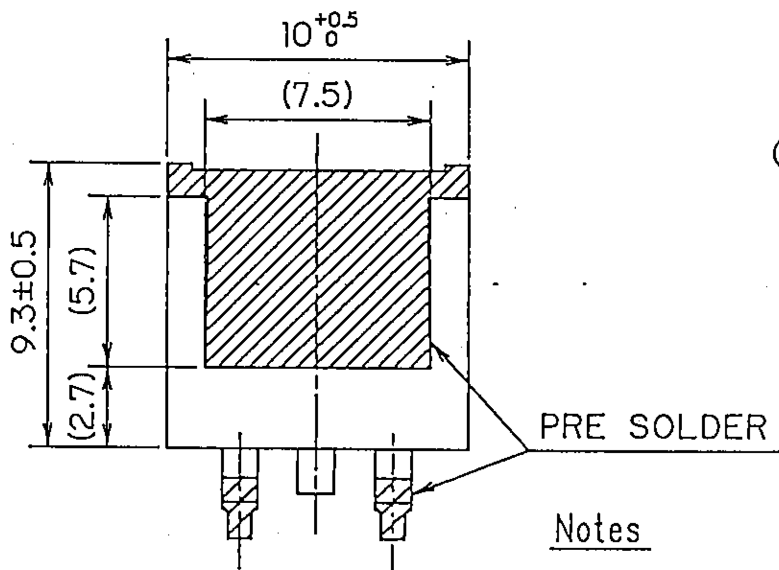
DIMENSIONS ARE IN MILLIMETERS.

FUJI POWER MOS FET

TYPE : 2SJ476-01S



BOTTOM VIEW



PRE SOLDER

CONNECTION

① GATE

④ ② DRAIN

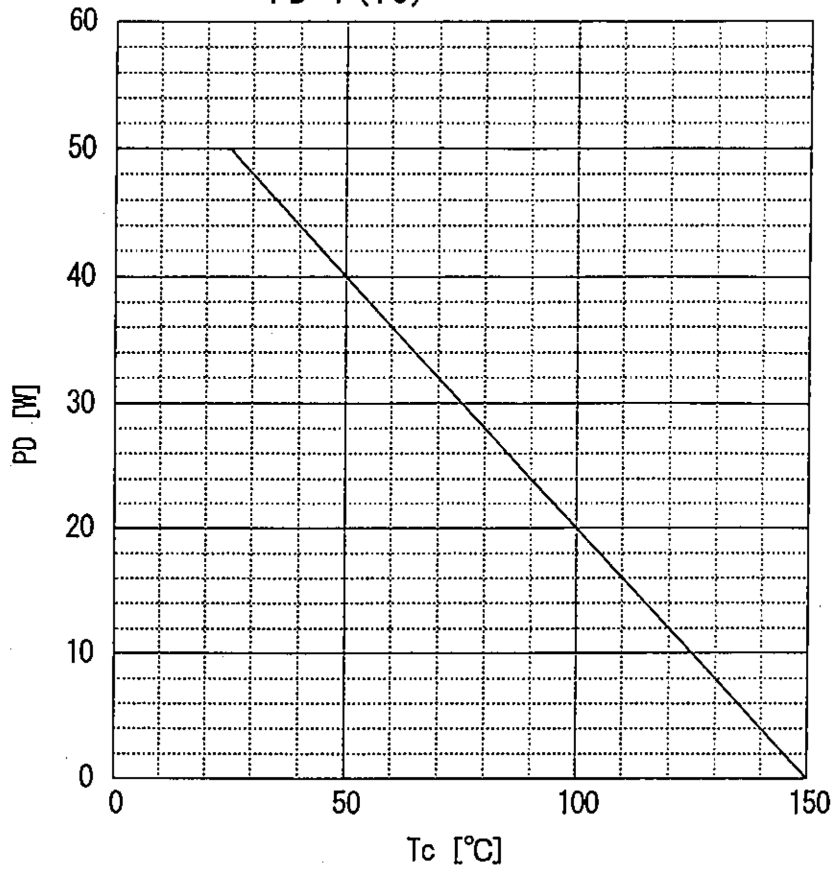
③ SOURCE

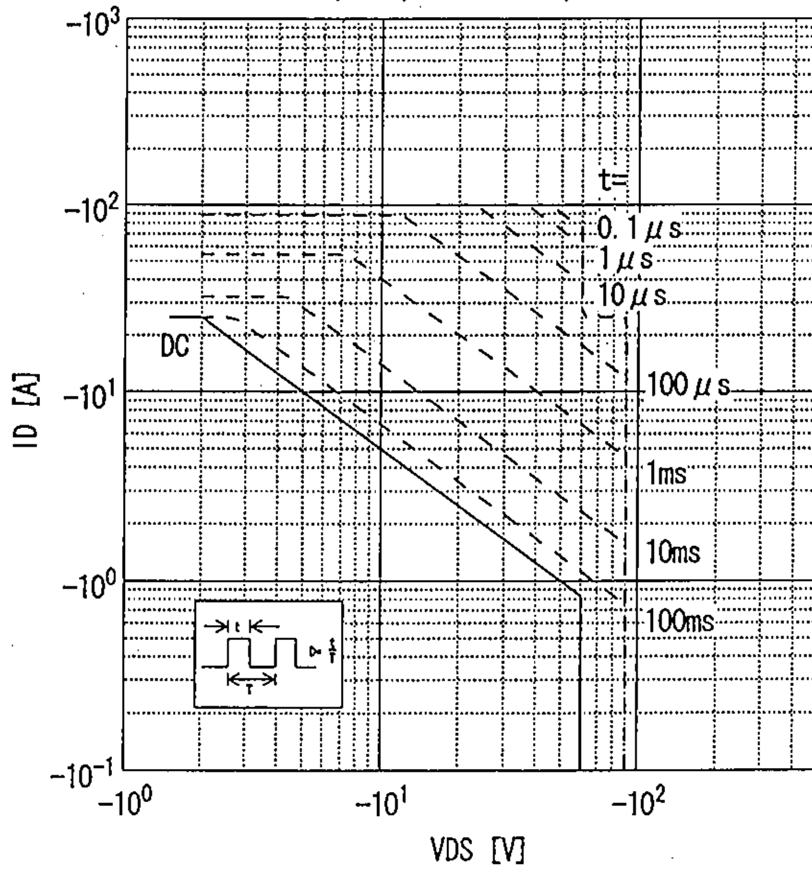
Notes

1. ( ) : REFERENCE DIMENSIONS.
2. * : DO NOT INCLUDE SOLDER.

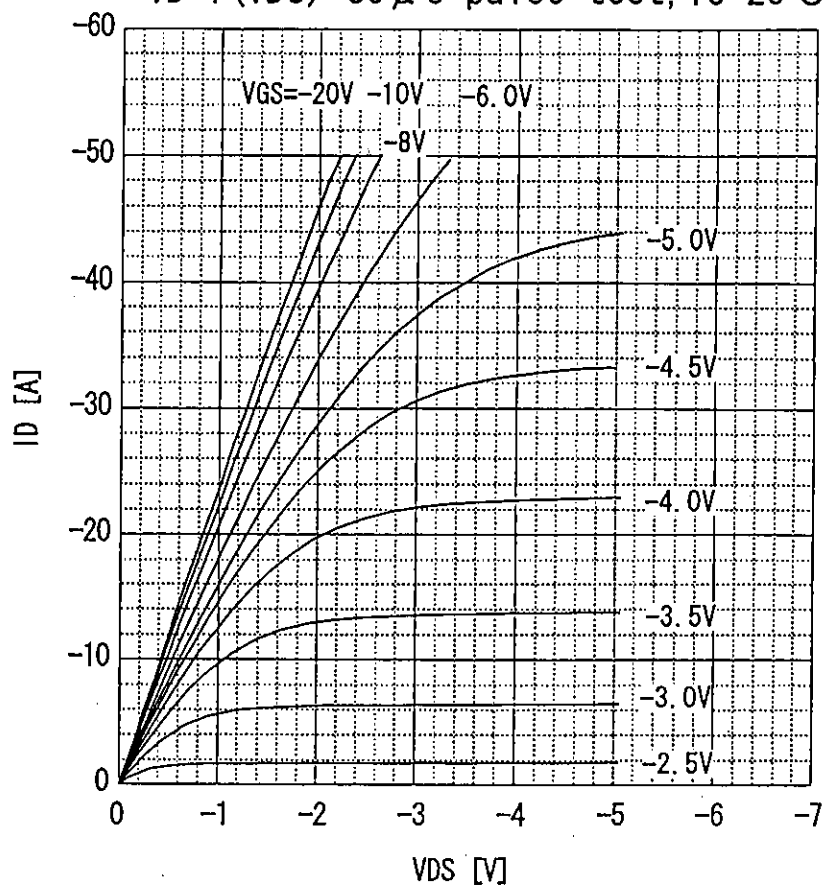
Note 1. Guaranteed mark of avalanche ruggedness.

DIMENSIONS ARE IN MILLIMETERS.

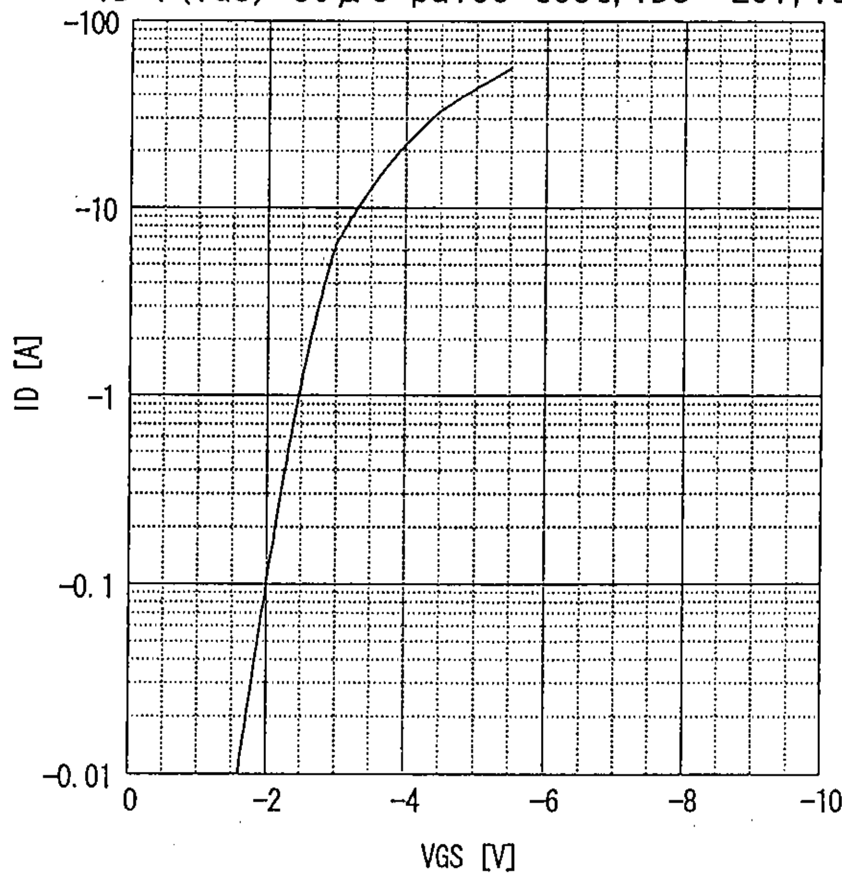

Power Dissipation
PD=f(Tc)
PD [W]
60
50
40
30
20
10
0
0
50
100
150
Tc [℃]


Safe operating area
ID=f(VDS):D=0.01,Tc=25℃
ID [A]
−10³
−10²
−10¹
−10⁰
−10⁻¹
−10⁰
−10¹
−10²
VDS [V]
t=
0.1 μs
1 μs
10 μs
100 μs
1ms
10ms
100ms
DC

Typical output characteristics
ID=f(VDS):80μs pulse test, Tc=25℃

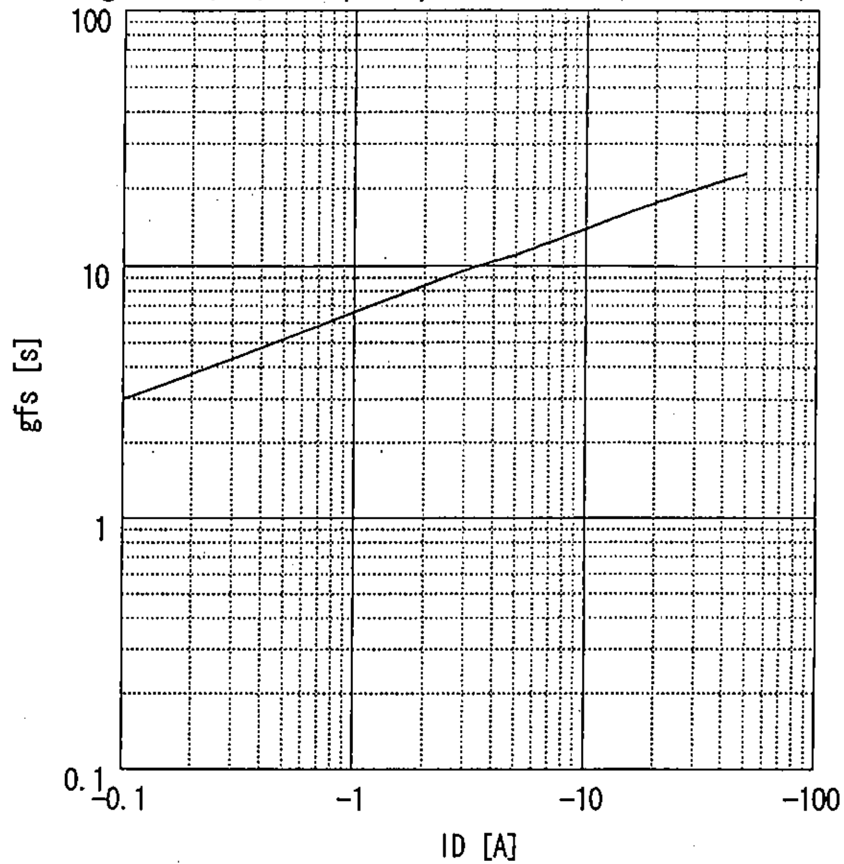


Typical transfer characteristic
ID=f(VGS):80μs pulse test, VDS=-25V, Tch=25℃



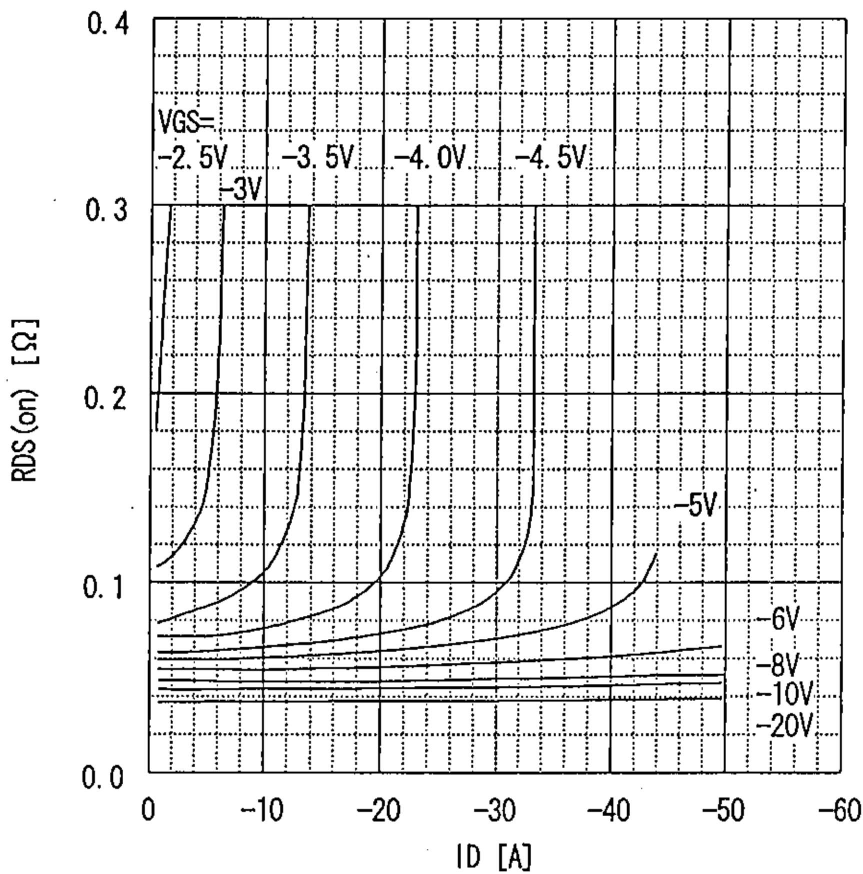
Typical forward transconductance

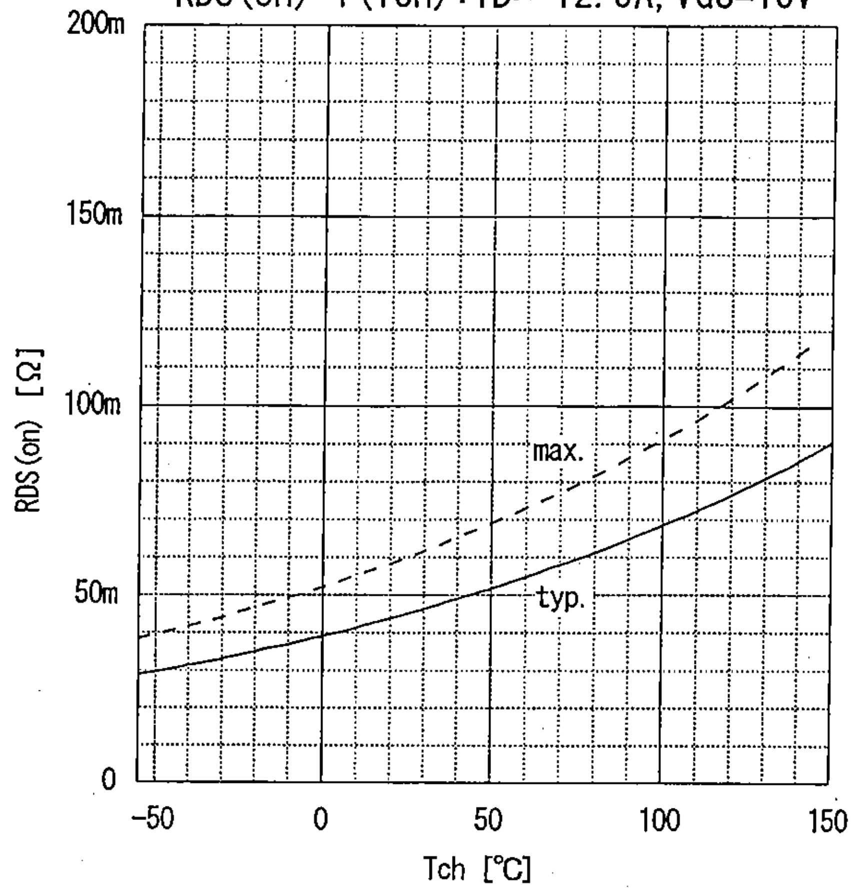
gfs=f(ID):80μs pulse test, VDS=-25V, Tch=25℃

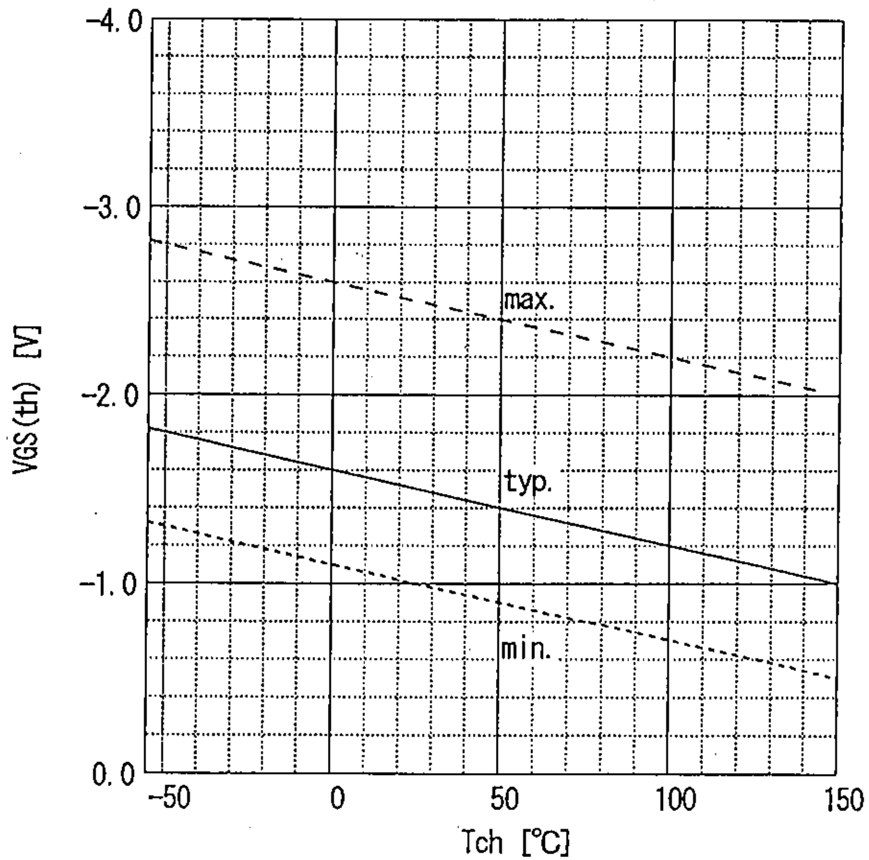


Typical drain-source on-state resistance

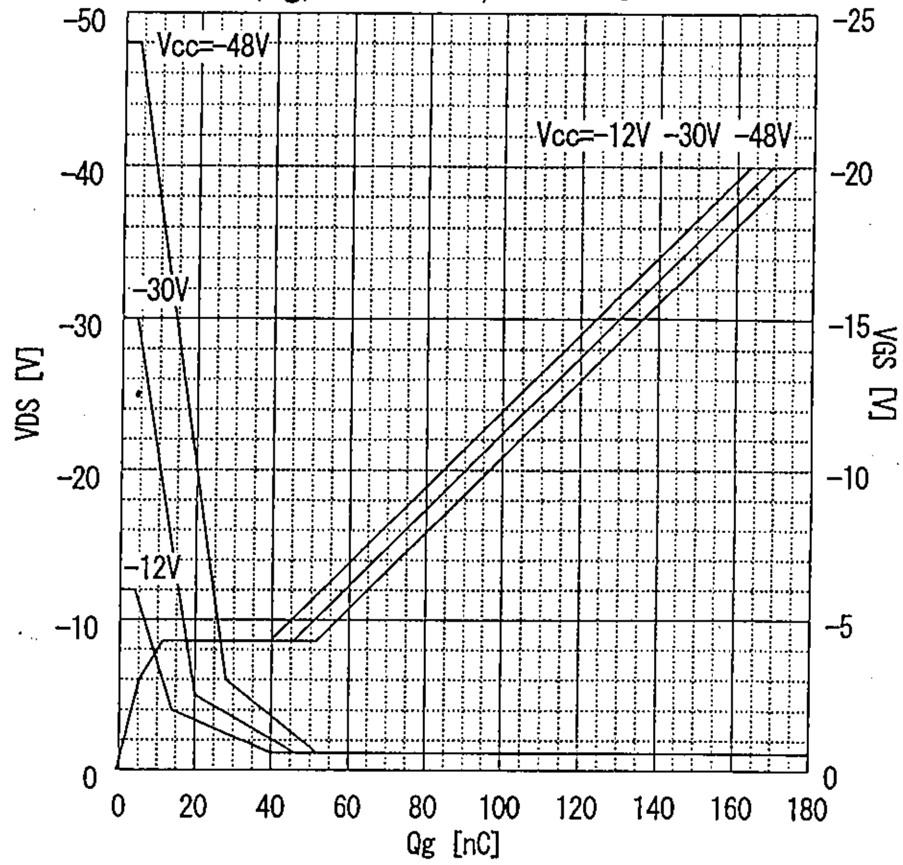
RDS(on)=f(ID):80μs pulse test, Tc=25℃



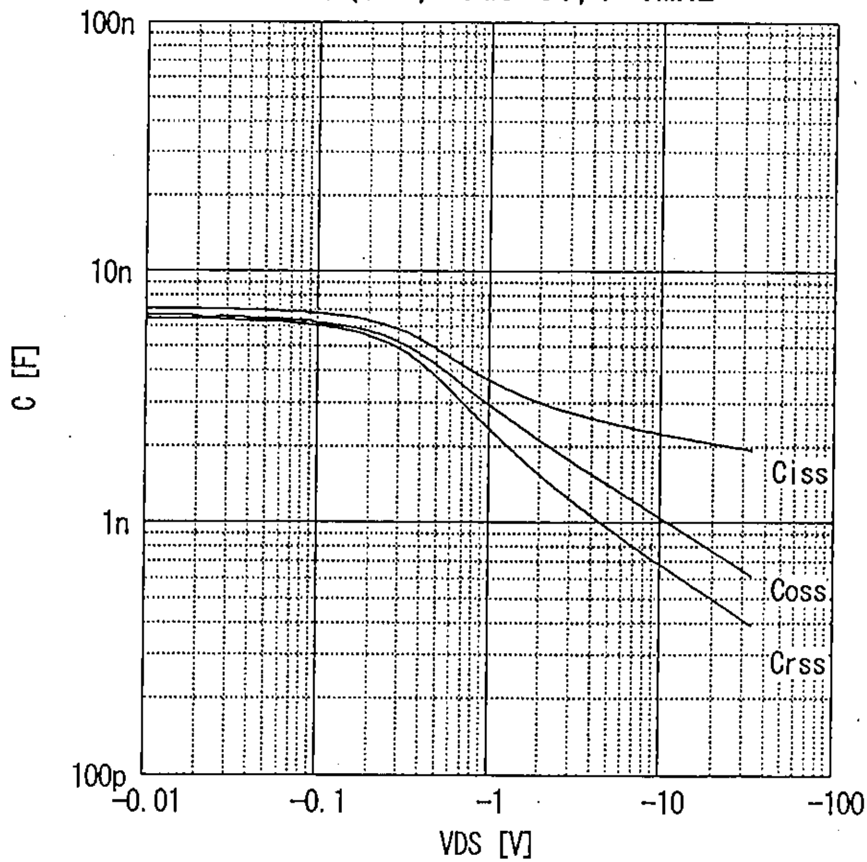

Drain-source on-state resistance
RDS(on)=f(Tch):ID=-12.5A, VGS=10V
200m
150m
100m
50m
0
RDS(on) [Ω]
max.
typ.
-50
0
50
100
150
Tch [℃]


Gate threshold voltage
VGS(th)=f(Tch):ID=-1mA, VDS=VGS
-4.0
-3.0
-2.0
-1.0
0.0
VGS(th) [V]
max.
typ.
min.
-50
0
50
100
150
Tch [℃]

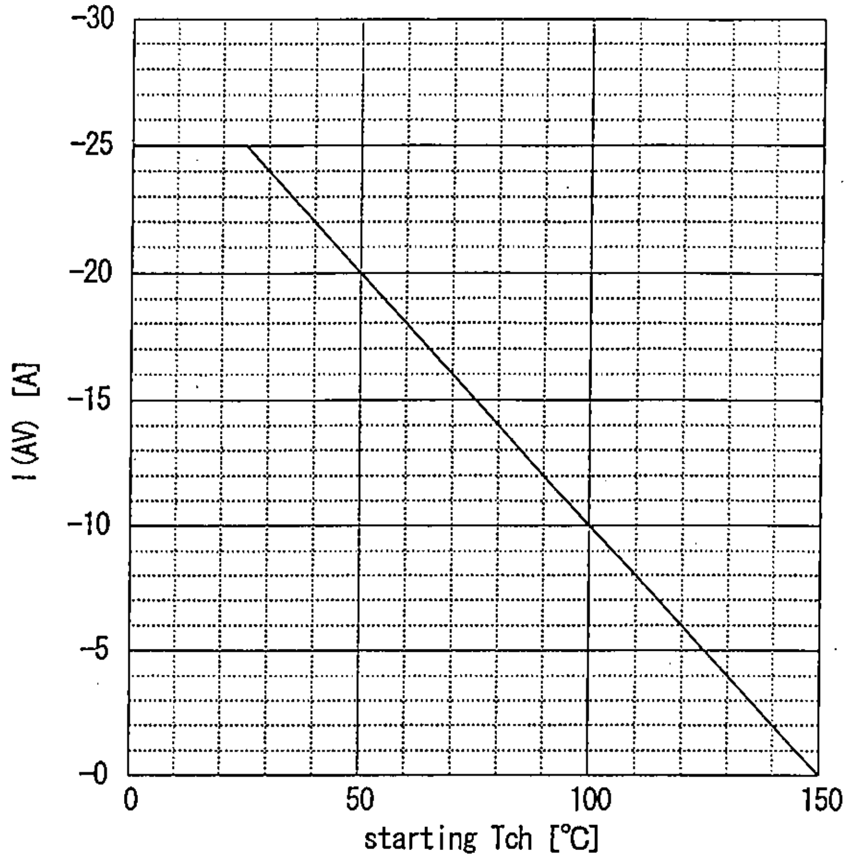
Typical gate charge characteristic
VGS=f(Qg):ID=-25A,Tc=25℃



Typical capacitances
C=f(VDS):VGS=0V,f=1MHz



Maximum Avalanche Current vs. starting Tch
I(AV)=f(starting Tch)



Maximum Avalanche Energy vs. starting Tch
E(AV)=f(starting Tch):Vcc=-24V, I(AV)≧-25A