PRODUCT DATA SHEET

To learn more about JGSEMI, please visit our website at

Datasheet Resources Samples

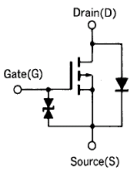
Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

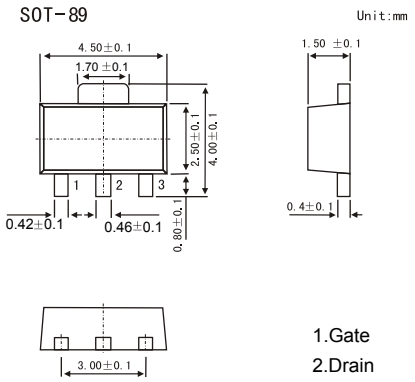
2SJ197

P-Channel MOSFET

■ Features

- $V_{DS\ (V)}$ =-60V
- I_D =-1.5 A
- $R_{DS(ON)}$ < 1Ω (V_{GS} =-10V)
- $R_{DS(ON)}$ < 1.5Ω (V_{GS} =-4V)
- Comp;ementary to 2SK1483





1.Gate
2.Drain
3.Source

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-60	V
Gate-Source Voltage	V_{GS}	±20	
Continuous Drain Current	I_D	1.5	A
Pulsed Drain Current (Note.1)	I_{DM}	3	
Power Dissipation	P_D	2	W
Junction Temperature	T_J	150	℃
Junction Storage Temperature Range	T_{stg}	-55 to 150	

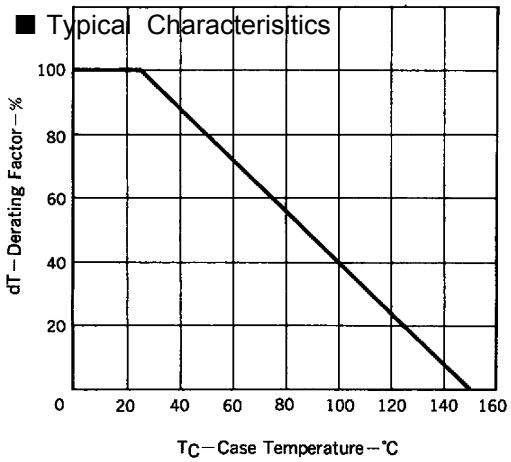
Note.1: PW ≤ 10ms,Duty Cycle ≤ 50%

■ Electrical Characteristics Ta = 25℃

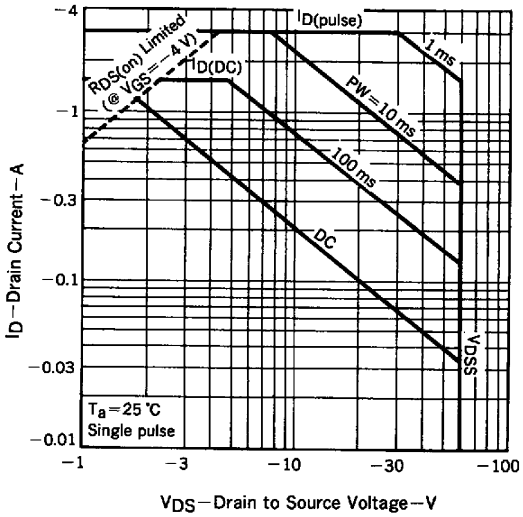
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	I_D=-250μA, V_{GS}=0V	-60			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-60V, V_{GS}=0V			-10	uA
Gate-Body leakage current	I_{GSS}	V_{DS}=0V, V_{GS}=±20V			±10	uA
Gate Cut off Voltage	$V_{GS(off)}$	V_{DS}=-10V,I_D=-1mA	-1		-3	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V, I_D=-0.5A			1.5	Ω
		V_{GS}=-4V, I_D=-0.5A			1	
Forward Transconductance	g_{FS}	V_{GS}=-10V, I_D=-0.5A	0.4	1		S
Input Capacitance	C_{iss}	V_{GS}=0V, V_{DS}=-10V, f=1MHz		220		pF
Output Capacitance	C_{oss}			125		
Reverse Transfer Capacitance	C_{rss}			17		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS(on)}$=-10V, V_{DS}=-25V, I_D=-0.5A, R_L=50Ω ,R_{GEN}=10Ω		45		ns
Turn-On Rise Time	t_r			70		
Turn-Off DelayTime	$t_{d(off)}$			380		
Turn-Off Fall Time	t_f			170		

■ Typical Characterisitics

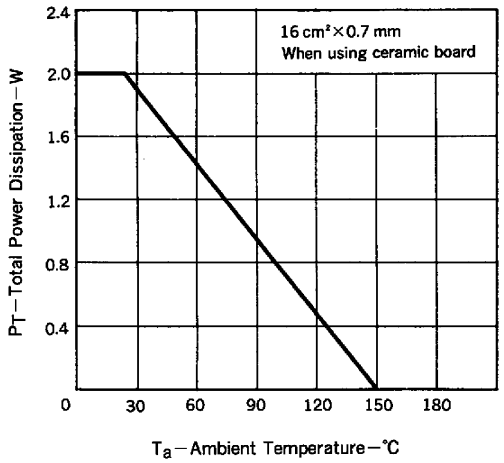
DERATING FACTOR OF FORWARD BIAS SAFE OPERATING AREA



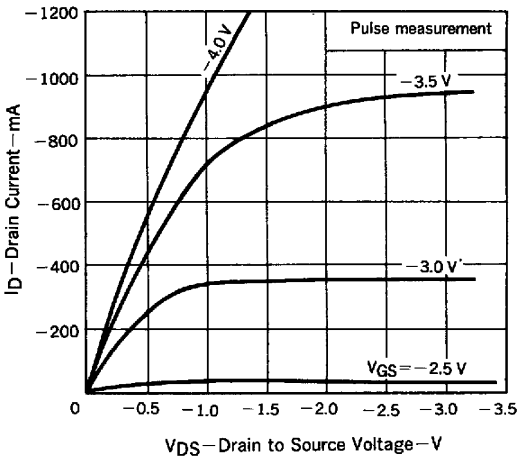
FORWARD BIAS SAFE OPERATING AREA



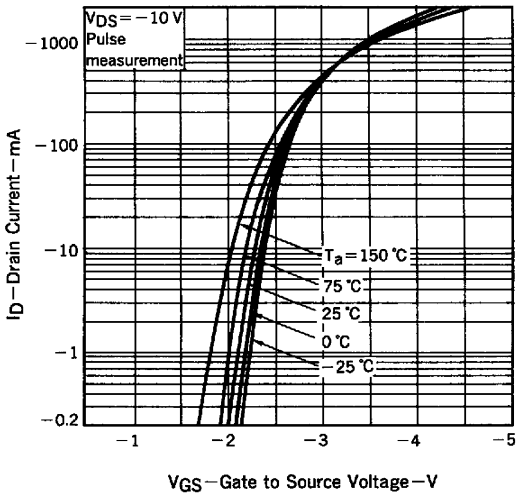
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



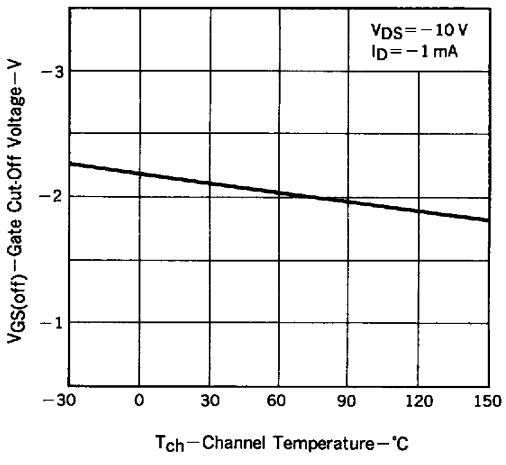
DRAIN CURRENT vs. DRAIN TO SOURCE VOLTAGE



TRANSFER CHARACTERISTICS

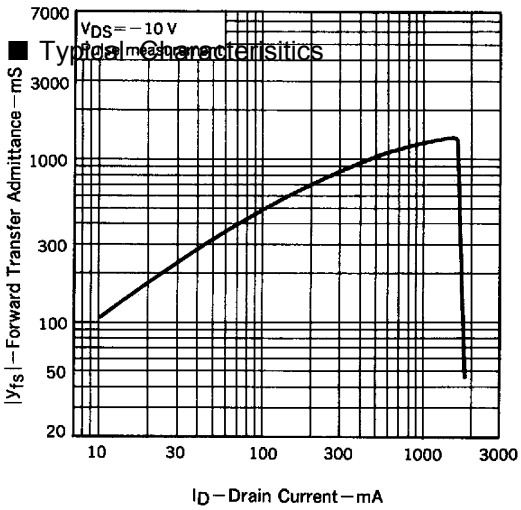


GATE TO SOURCE CUTOFF VOLTAGE vs. CHANNEL TEMPERATURE

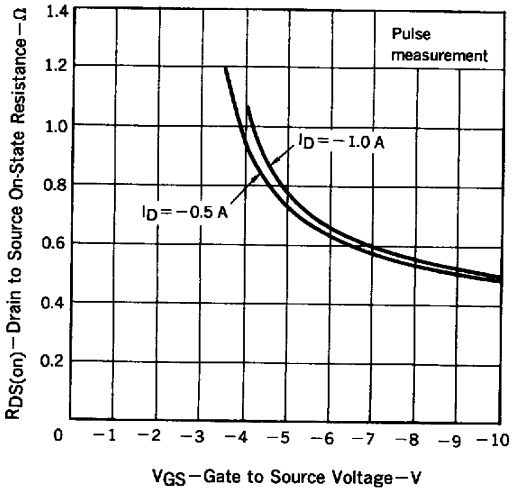


■ Typical Characteristics

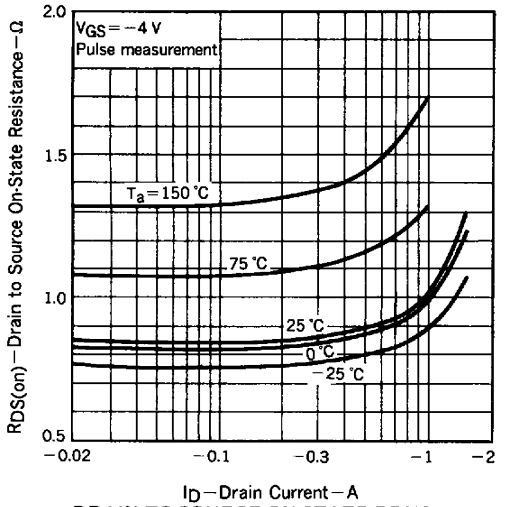
FORWARD TRANSFER ADMITTANCE vs. DRAIN CURRENT



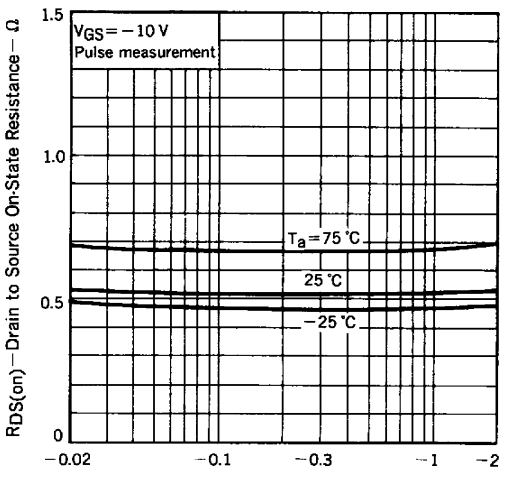
DRAIN TO SOURCE ON-STATE RESISTANCE vs. GATE TO SOURCE VOLTAGE



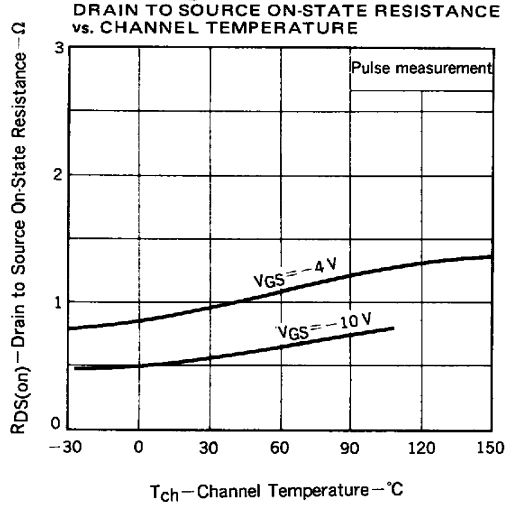
DRAIN TO SOURCE ON-STATE RESISTANCE vs. DRAIN CURRENT



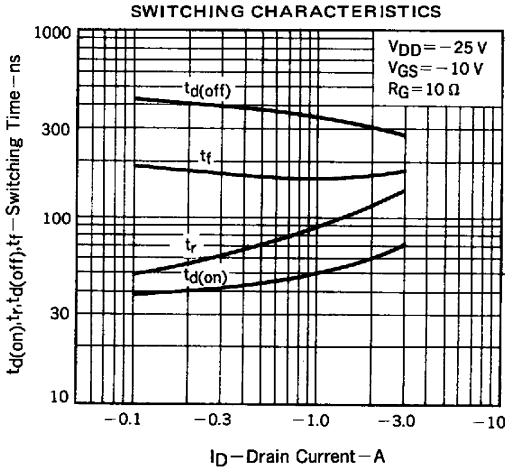
DRAIN TO SOURCE ON-STATE RESISTANCE vs. DRAIN CURRENT



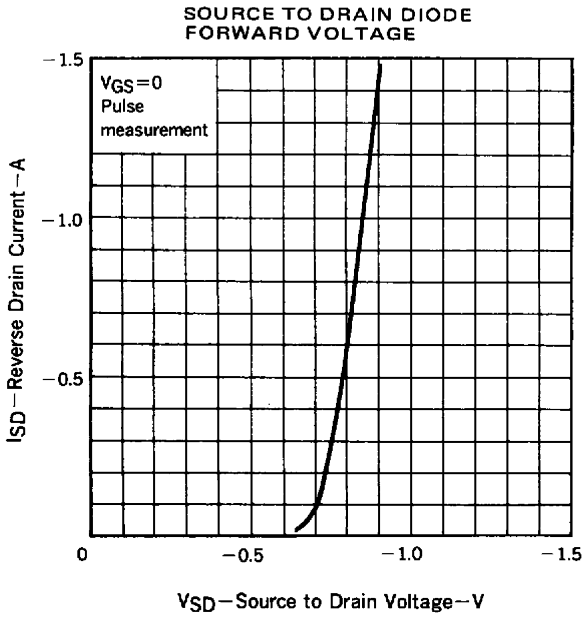
DRAIN TO SOURCE ON-STATE RESISTANCE vs. CHANNEL TEMPERATURE



SWITCHING CHARACTERISTICS



■ Typical Characterisitics



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