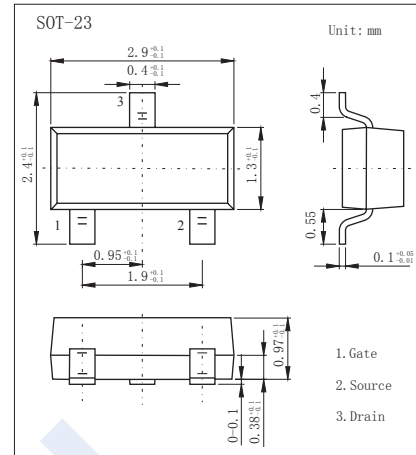
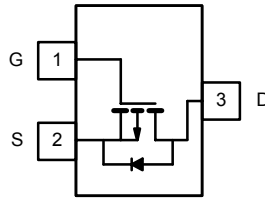


P-Channel Enhancement MOSFET

SI2341DS (KI2341DS)

■ Features

- $V_{DS} (V) = -30V$
- $I_D = -2.8A$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 72m\Omega$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 120m\Omega$ ($V_{GS} = -4.5V$)



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter		Symbol	5 sec	Steady State	Unit
Drain-Source Voltage		V_{DS}	-30		V
Gate-Source Voltage		V_{GS}	± 20		
Continuous Drain Current *1	$T_a = 25^\circ C$	I_D	-2.8	-2.5	A
	$T_a = 70^\circ C$		-2.2	-2.0	
Pulsed Drain Current		I_{DM}	-12		
Power Dissipation *1	$T_a = 25^\circ C$	P_D	0.9	0.71	W
	$T_a = 70^\circ C$		0.57	0.45	
Thermal Resistance.Junction- to-Ambient *1		R_{thJA}	140		$^\circ C/W$
Thermal Resistance.Junction- to-Ambient *2			175		
Thermal Resistance.Junction- to-Foot			75		
Junction Temperature		T_J	150		$^\circ C$
Storage Temperature Range		T_{stg}	-55 to 150		

*1 Surface Mounted on FR4 Board, $t \leq 5$ sec.

*2 Surface Mounted on FR4 Board.

P-Channel Enhancement MOSFET

SI2341DS (KI2341DS)

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =-250 μA, V _{GS} =0V	-30			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =-24V, V _{GS} =0V			-1	μA
		V _{DS} =-24V, V _{GS} =0V, T _J =55°C			-10	
Gate-Body leakage current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} I _D =-250 μA	-1		-3	V
Static Drain-Source On-Resistance *1	R _{DS(on)}	V _{GS} =-10V, I _D =-2.8A		57	72	mΩ
		V _{GS} =-4.5V, I _D =-2.0A		90	120	
On state drain current *1	I _{D(ON)}	V _{GS} =-10V, V _{DS} =-5V	-6			A
Forward Transconductance *1	g _{FS}	V _{DS} =-5V, I _D =-2.8A		8.0		S
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =-15V, f=1MHz		400		pF
Output Capacitance	C _{oss}			95		
Reverse Transfer Capacitance	C _{rss}			70		
Total Gate Charge	Q _g	V _{GS} =-10V, V _{DS} =-15V, I _D =-2.8A		9.5	15	nC
Gate Source Charge	Q _{gs}			1.5		
Gate Drain Charge	Q _{gd}			2.5		
Turn-On DelayTime	t _{d(on)}	V _{GS} =-4.5V, V _{DS} =-15V, R _L =15Ω, R _{GEN} =6Ω I _D =-1.0 A		7	15	ns
Turn-On Rise Time	t _r			15	25	
Turn-Off DelayTime	t _{d(off)}			20	30	
Turn-Off Fall Time	t _f			20	30	
Maximum Body-Diode Continuous Current	I _S		5 sec			
		Steady State			-0.6	
Diode Forward Voltage	V _{SD}	I _S =-0.75A, V _{GS} =0V		-0.8	-1.2	V

*1Pulse test: PW ≤ 300us duty cycle ≤ 2%.

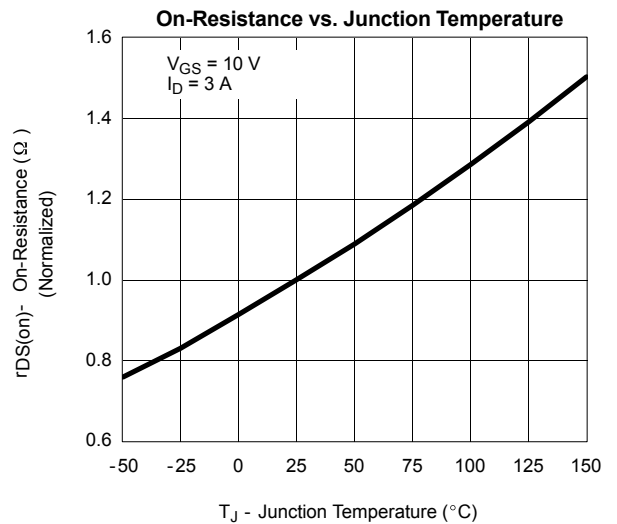
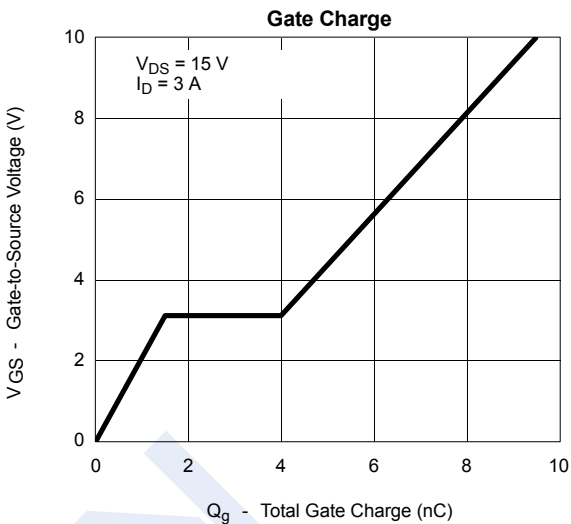
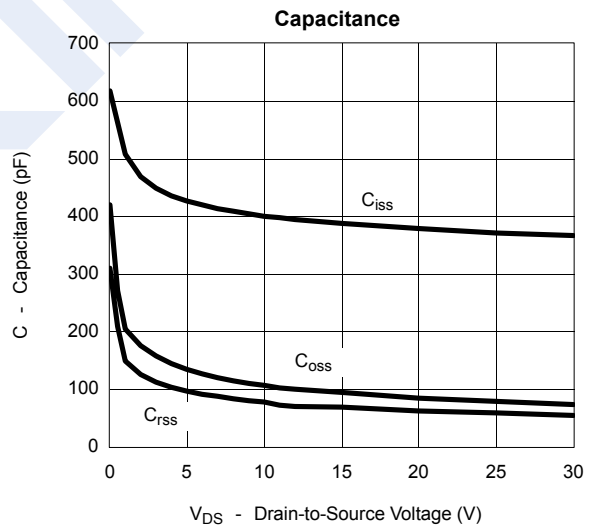
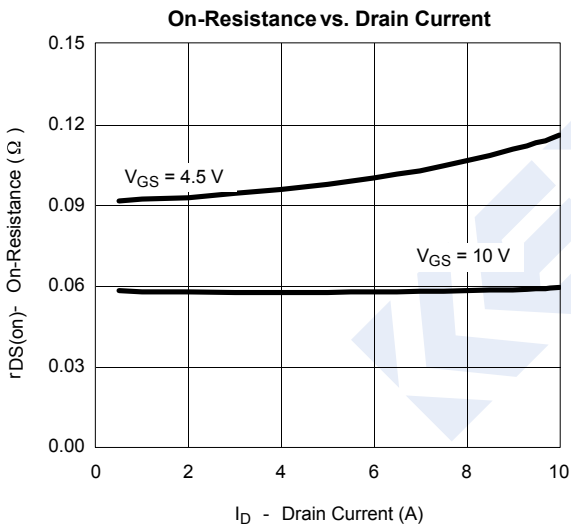
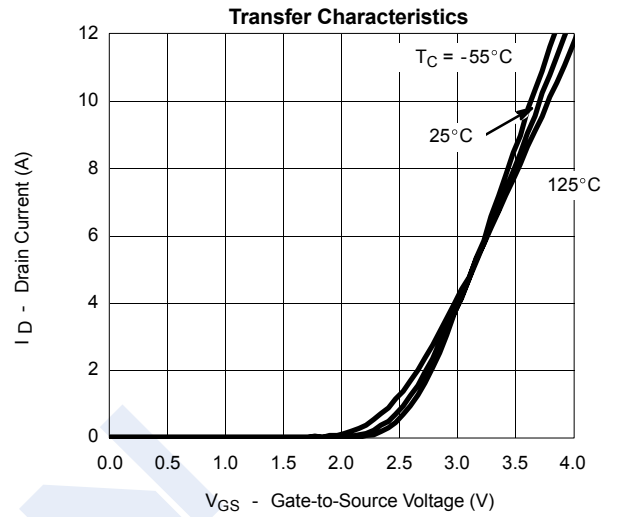
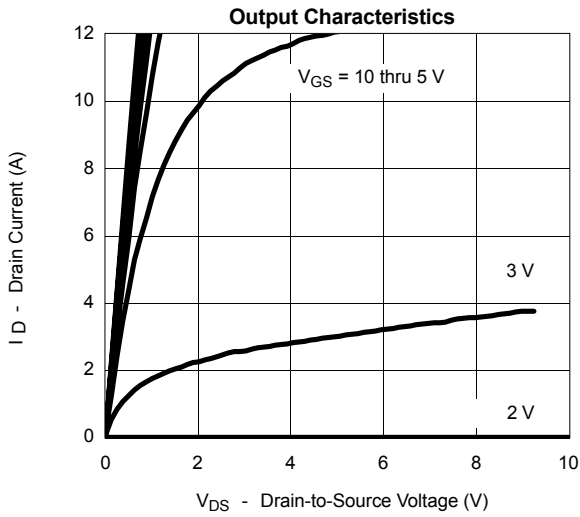
■ Marking

Marking	F1*
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P-Channel Enhancement MOSFET

SI2341DS (KI2341DS)

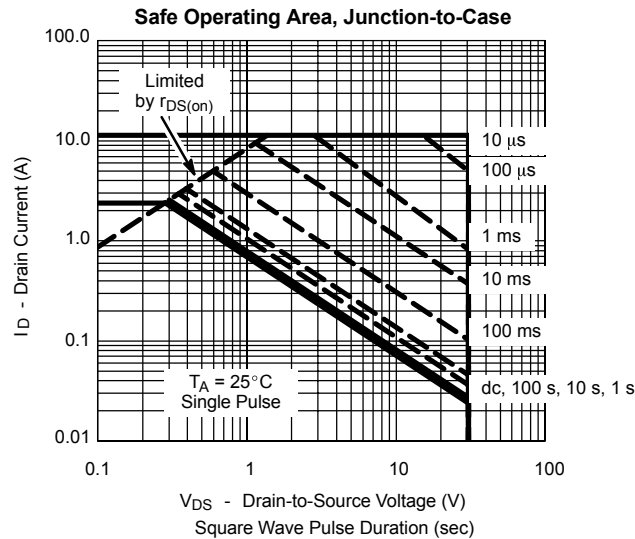
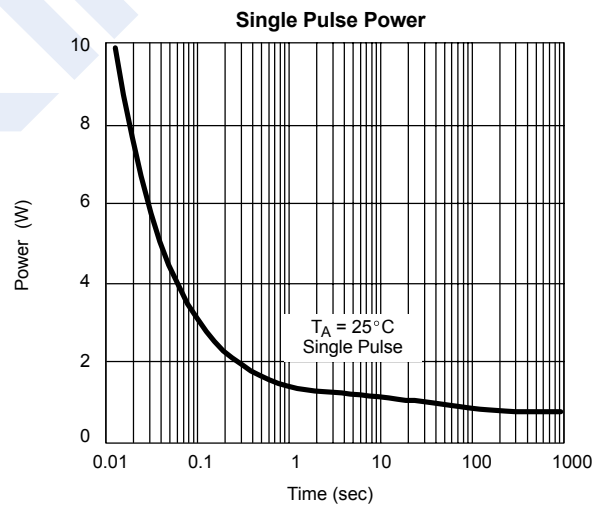
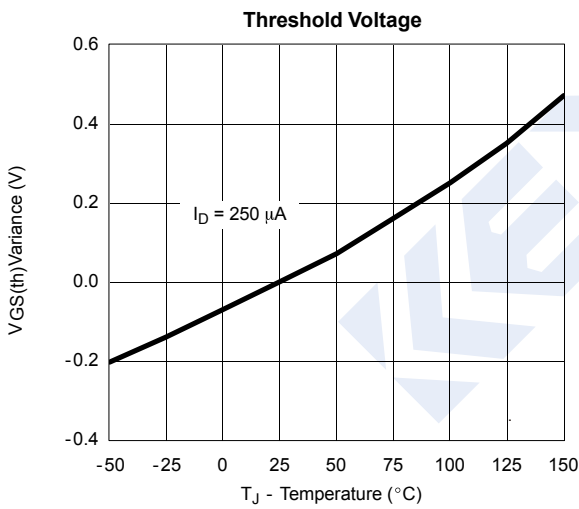
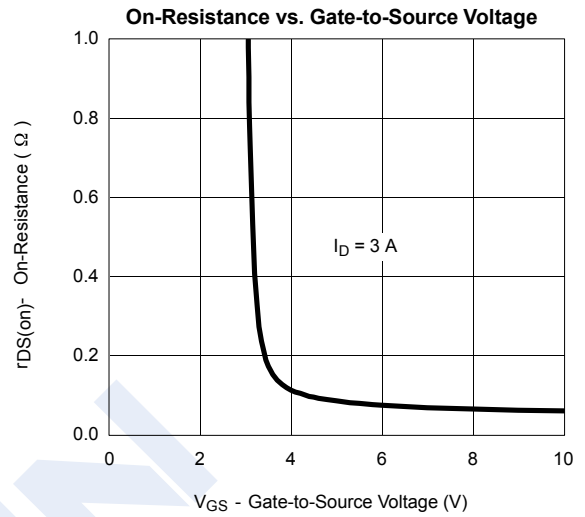
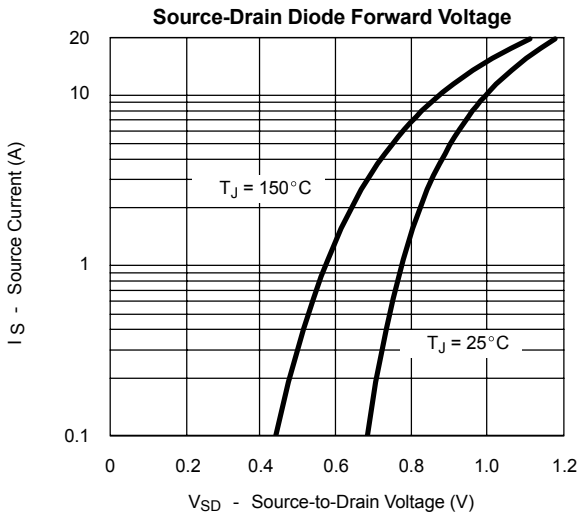
■ Typical Characteristics



P-Channel Enhancement MOSFET

SI2341DS (KI2341DS)

■ Typical Characteristics



P-Channel Enhancement MOSFET

SI2341DS (KI2341DS)

■ Typical Characteristics

