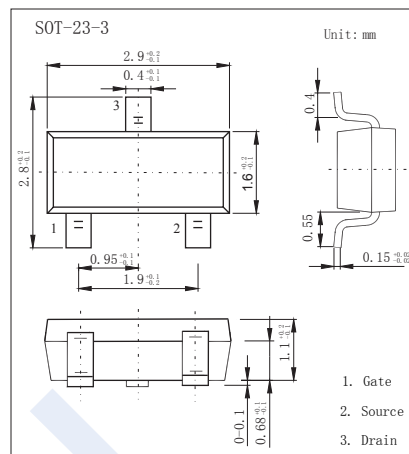
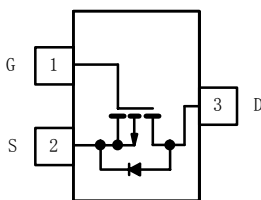


P-Channel Enhancement MOSFET

SI2325DS (KI2325DS)

■ Features

- $V_{DS} (V) = -150V$
- $I_D = -0.69A$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 1.2\Omega$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 1.3\Omega$ ($V_{GS} = -6V$)

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

Parameter	Symbol	5 sec	Steady State	Unit
Drain-Source Voltage	V _{bs}	-150		V
Gate-Source Voltage	V _{GS}	± 20		
Continuous Drain Current (T _J = 150 °C) *1	I _D	-0.69	-0.53	A
		-0.55	-0.43	
Pulsed Drain Current	I _{DM}	-1.6		
Single-Pluse Avalanche Current	I _{AS}	4.5		
Single-Pulse Avalanche Energy	E _{AS}	1.01		mJ
Power Dissipation	P _D	1.25	0.75	W
		0.8	0.48	
Thermal Resistance.Junction- to-Ambient t≤5 sec Steady State	R _{thJA}	100		°C/W
		166		
Thermal Resistance.Junction- to-Foot	R _{thJF}	50		°C
Junction Temperature	T _J	150		
Storage Temperature Range	T _{stg}	-55 to 150		

*1 Surface Mounted on 1" x 1" FR4 Board.

P-Channel Enhancement MOSFET

SI2325DS (K12325DS)

■ 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	-150			V
Zero Gate Voltage Drain Current	I _{DSS}	V _D =-150V, V _{GS} =0V			-1	μA
		V _D =-150V, V _{GS} =0V, T _J =55°C			-10	
Gate-Body leakage current	I _{GSS}	V _D =0V, V _{GS} =±20V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _D =V _{GS} I _D =-250 μA	-2.5		-4.5	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =-10V, I _D =-0.5A		1.0	1.2	Ω
		V _{GS} =-6V, I _D =-0.5A		1.05	1.3	
On state drain current	I _{D(ON)}	V _{GS} =-10V, V _D =-15V	-1.6			A
Forward Transconductance	g _{FS}	V _D =-15V, I _D =-0.5A		2.2		S
Gate Resistance	R _g	f=1.0MHz		9		Ω
Input Capacitance	C _{iss}	V _{GS} =0V, V _D =-25V, f=1MHz *1		340	510	pF
Output Capacitance	C _{oss}			30		
Reverse Transfer Capacitance	C _{rss}			16		
Total Gate Charge	Q _g	V _{GS} =-10V, V _D =-75V, I _D =-0.5A *1		7.7	12	nC
Gate Source Charge	Q _{gs}			1.5		
Gate Drain Charge	Q _{gd}			2.5		
Turn-On DelayTime	t _{d(on)}	V _{GS} =-10V, V _D =-75V, R _L =75 Ω, R _{GEN} =6 Ω I _D =-1.0A *1		7	11	ns
Turn-On Rise Time	t _r			11	17	
Turn-Off DelayTime	t _{d(off)}			16	25	
Turn-Off Fall Time	t _f			11	17	
Body Diode Reverse Recovery Charge	Q _{rr}	IF = 0.5 A, di/dt = 100 A/ s		90	135	nC
Maximum Body-Diode Continuous Current	I _S	5 sec			-1.0	A
		Steady State			-0.6	
Diode Forward Voltage	V _{SD}	I _S =-1.0A, V _{GS} =0V		-0.7	-1.2	V

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

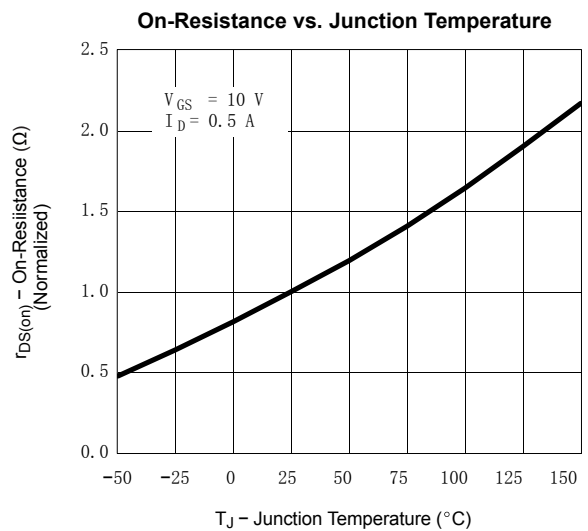
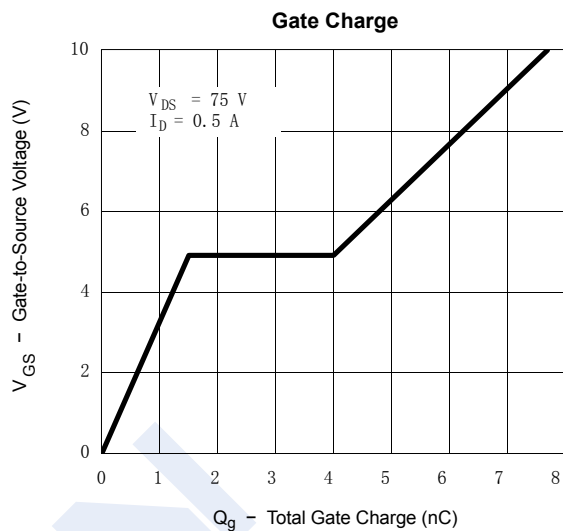
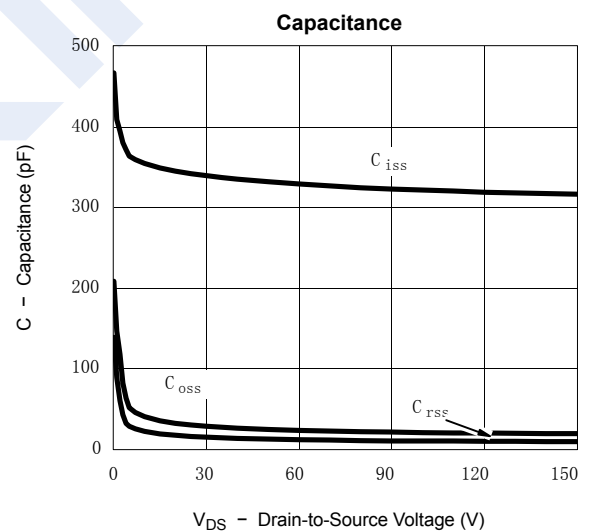
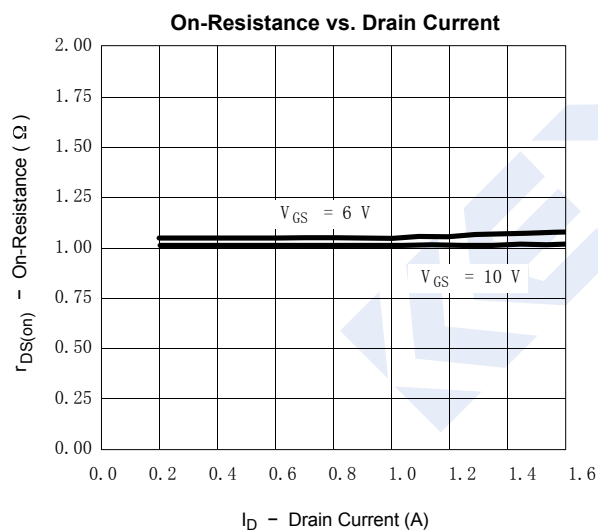
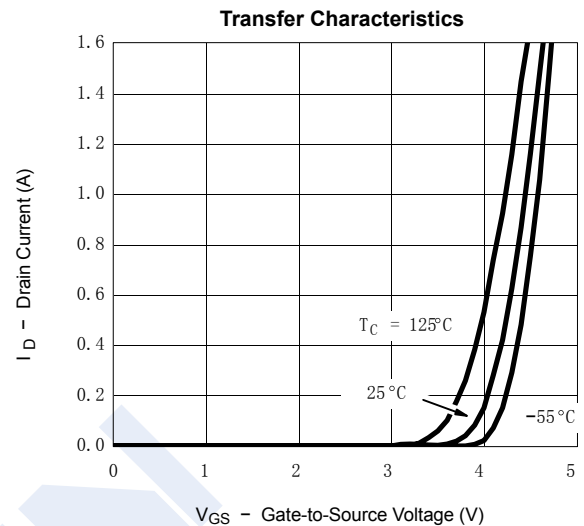
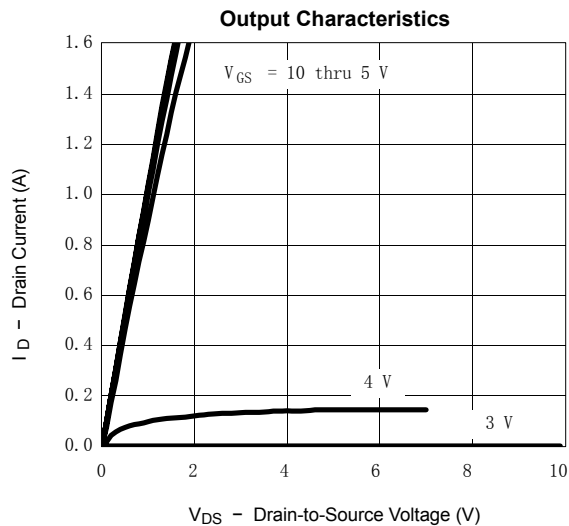
■ Marking

Marking	D5*
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P-Channel Enhancement MOSFET

SI2325DS (KI2325DS)

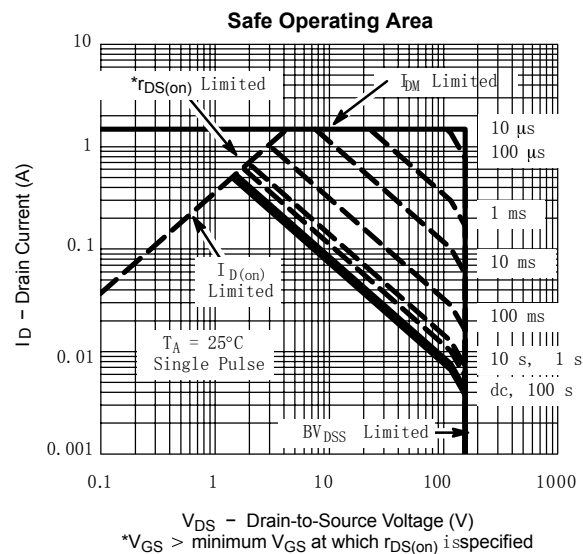
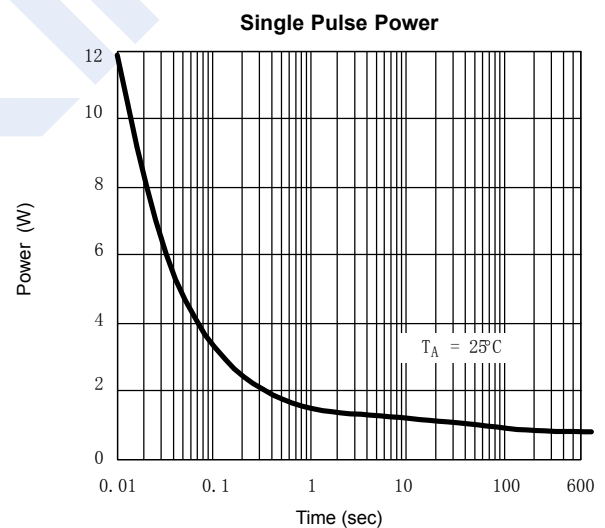
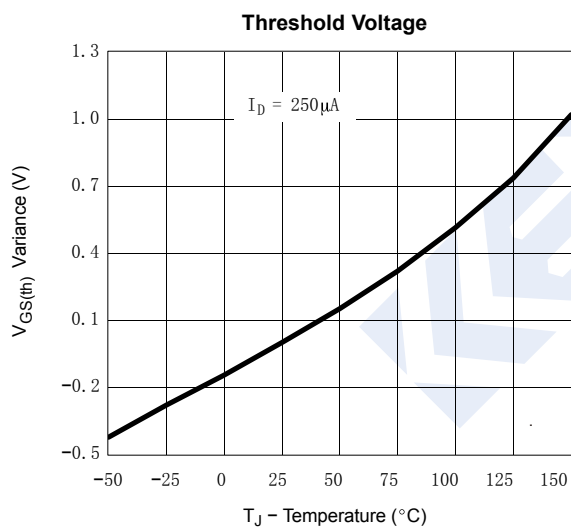
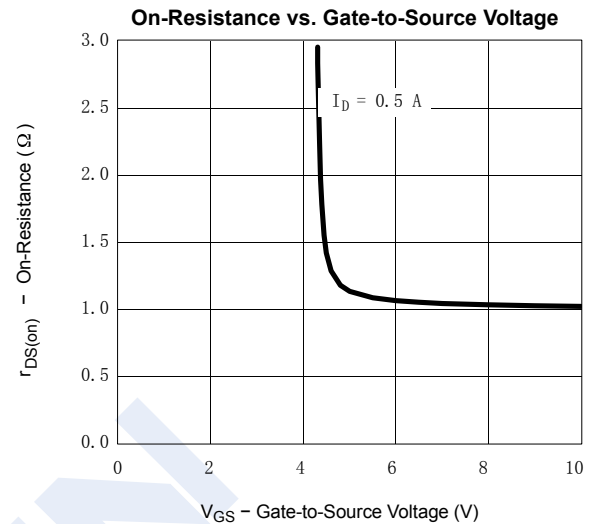
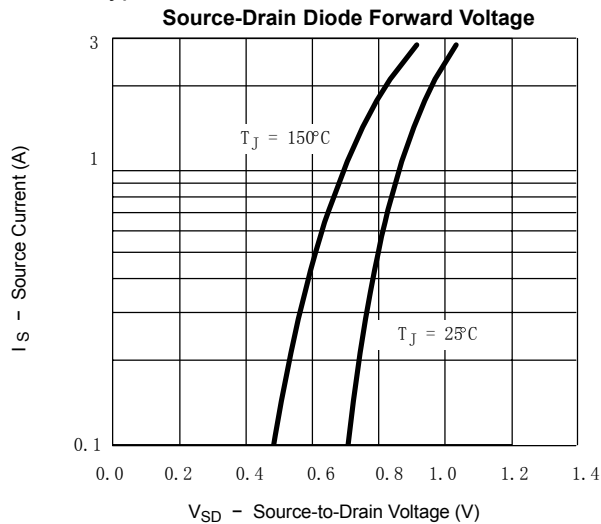
■ Typical Characteristics



P-Channel Enhancement MOSFET

SI2325DS (K12325DS)

■ Typical Characteristics



P-Channel Enhancement MOSFET

SI2325DS (KI2325DS)

■ Typical Characteristics

