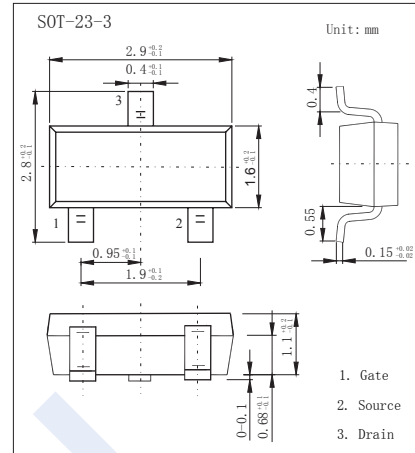
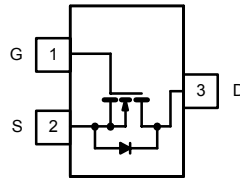


N-Channel Enhancement MOSFET

SI2302DS (KI2302DS)

■ Features

- $V_{DS}=20V$
- $R_{DS(on)}=85m\Omega@V_{GS}=4.5V, I_D=3.6A$
- $R_{DS(on)}=115m\Omega@V_{GS}=2.5V, I_D=3.1A$

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

Parameter	Symbol	Rating	Unit	
Drain-Source Voltage	V_{DS}	20	V	
Gate-Source Voltage	V_{GS}	± 8		
Continuous Drain Current $T_J=150^\circ C$ *1	I_D	$T_a=25^\circ C$	2.8	A
		$T_a=70^\circ C$	2.2	
Pulsed Drain Current	I_{DM}	10		
Power Dissipation	P_D	$T_a=25^\circ C$	1.25	W
		$T_a=70^\circ C$	0.8	
Thermal Resistance.Junction- to-Ambient	R_{thJA}	*1	100	$^\circ C/W$
		*2	166	
Junction Temperature	T_J	150	$^\circ C$	
Storage Temperature Range	T_{stg}	-55 to 150		

Notes:

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

*2.Surface Mounted on FR4 Board.

N-Channel Enhancement MOSFET

SI2302DS (KI2302DS)

■ 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	20			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =20V, V _{GS} =0V			1	μA
		V _{DS} =20V, V _{GS} =0V, T _J =55 °C			10	
Gate-Body Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±8V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250 μA	0.6		1.0	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =4.5V, I _D =3.6A		45	85	mΩ
		V _{GS} =2.5V, I _D =3.1A		70	115	
Forward Transconductance *	g _{fs}	V _{DS} =5V, I _D =3.6A		8		S
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =10V, f=1MHz		300		pF
Output Capacitance	C _{oss}			120		
Reverse Transfer Capacitance	C _{rss}			80		
Total Gate Charge	Q _g	V _{DS} =10V, V _{GS} =4.5V, I _D =3.6A		4	10	nC
Gate-Source Charge	Q _{gs}			0.65		
Gate-Drain Charge	Q _{gd}			1.5		
Turn-On DelayTime	t _{d(on)}	V _{GS} =4.5V, V _{DS} =10V, R _L =5.5 Ω, R _{GEN} =6 Ω I _D =3.6A		7	15	ns
Turn-On Rise Time	t _r			55	80	
Turn-Off DelayTime	t _{d(off)}			16	60	
Turn-Off Fall Time	t _f			10	25	
Continuous Source Current (Diode Conduction)	I _S			1.6		A
Diode Forward Voltage	V _{SD}	I _S =1.6 A, V _{GS} =0V		0.76	1.2	V

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

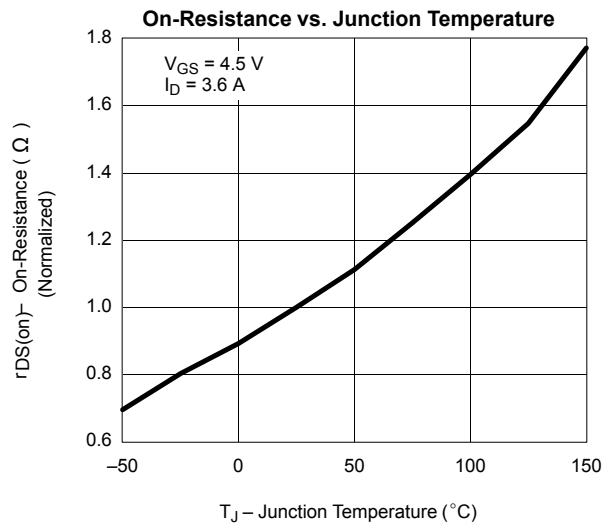
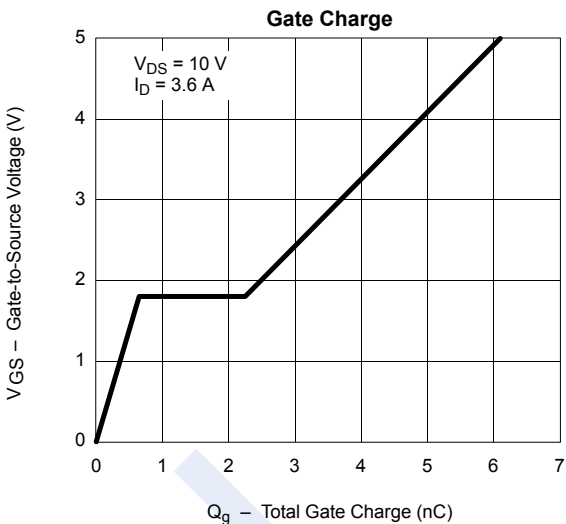
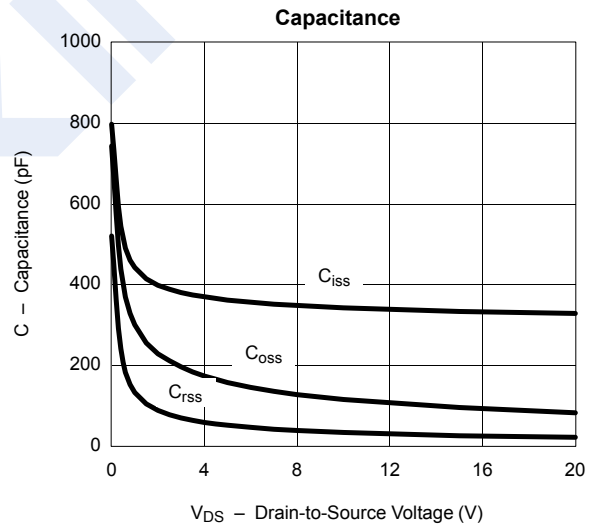
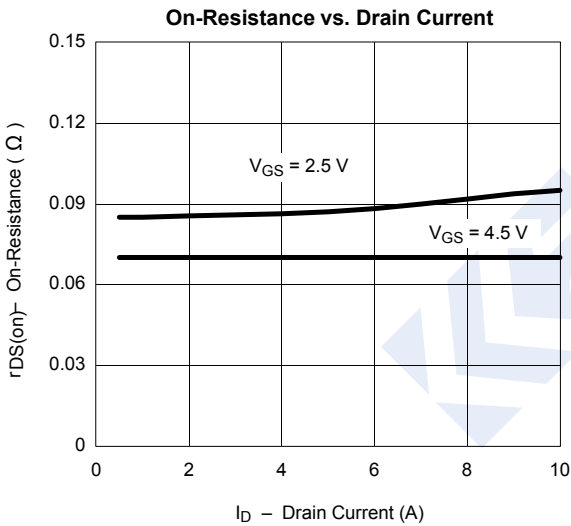
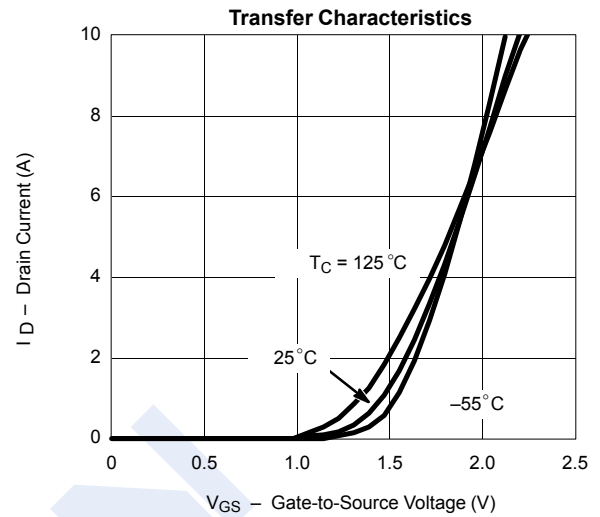
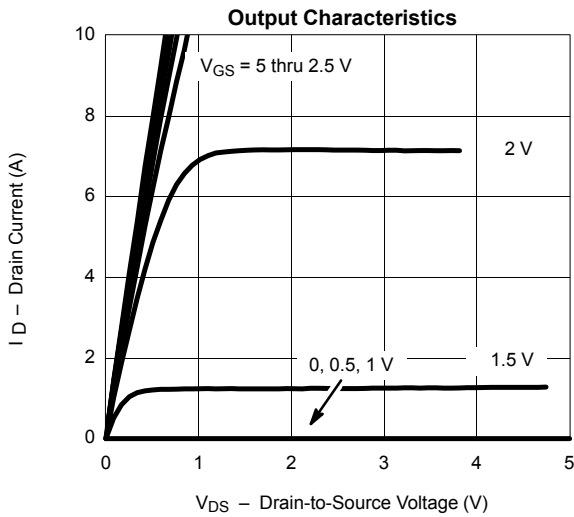
■ Marking

Marking	A2*
---------	-----

N-Channel Enhancement MOSFET

SI2302DS (KI2302DS)

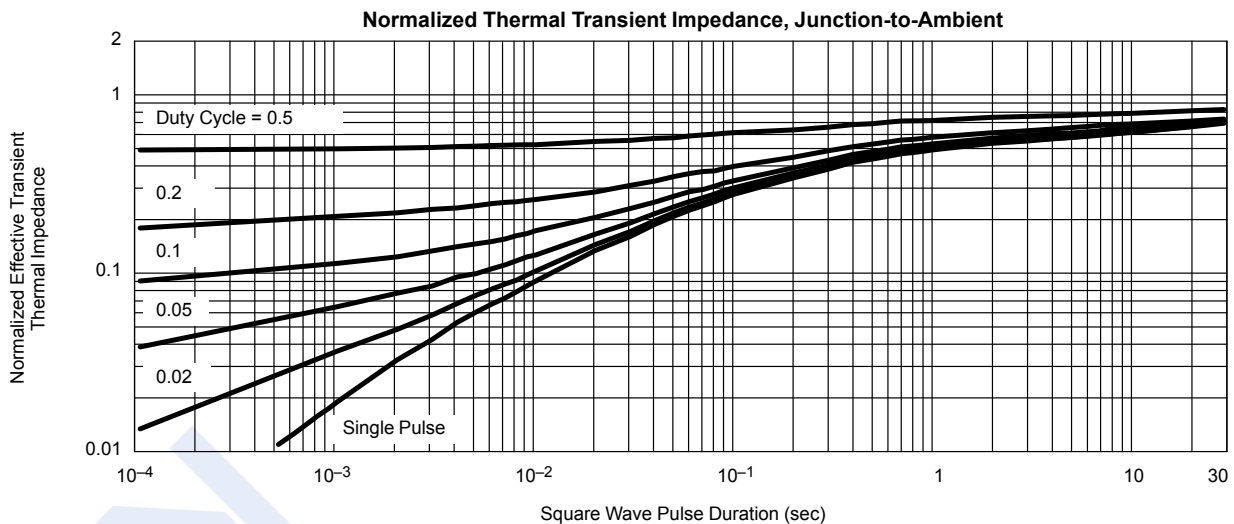
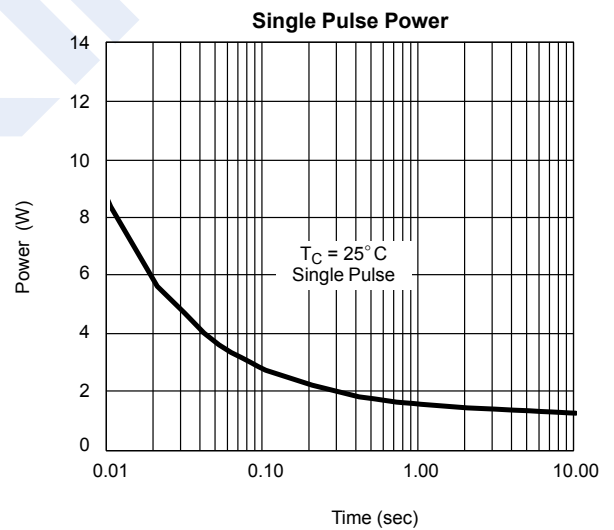
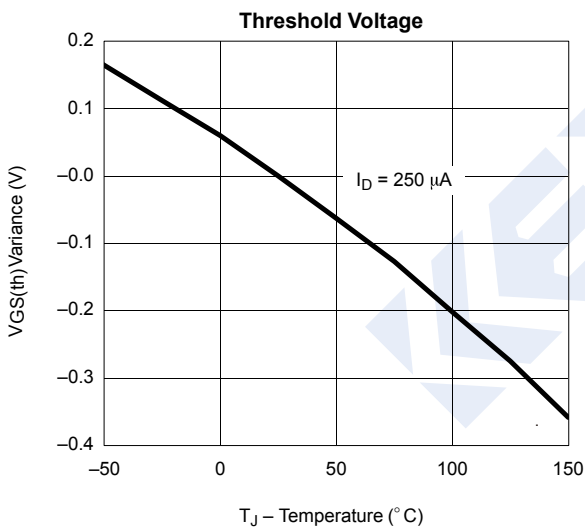
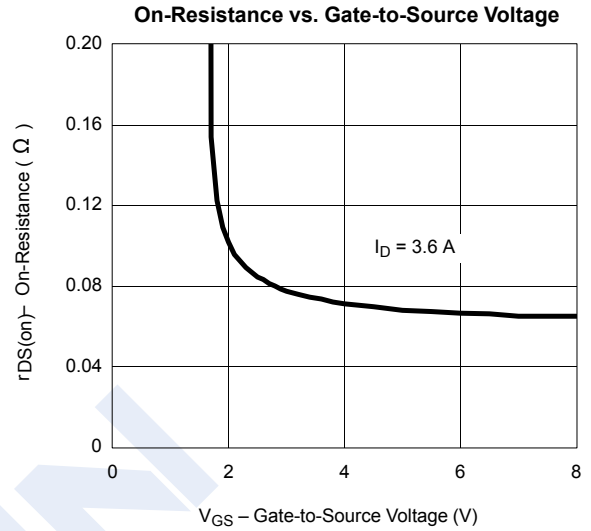
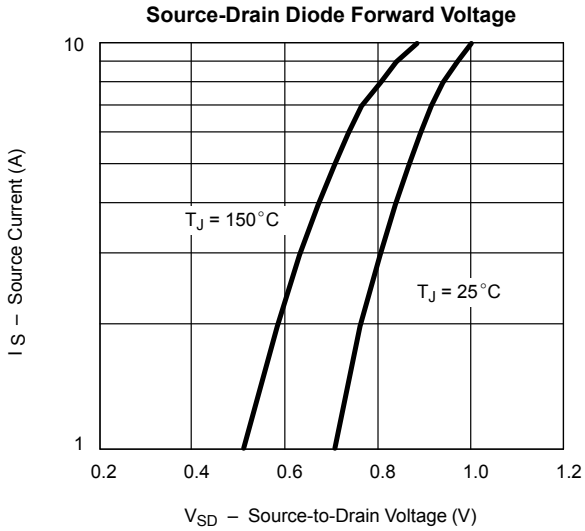
■ Typical Characteristics



N-Channel Enhancement MOSFET

SI2302DS (KI2302DS)

■ Typical Characteristics



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [KEXIN](#) manufacturer:

Other Similar products are found below :

[614233C](#) [648584F](#) [MCH3443-TL-E](#) [MCH6422-TL-E](#) [FDPF9N50NZ](#) [FW216A-TL-2W](#) [FW231A-TL-E](#) [APT5010JVR](#) [NTNS3A92PZT5G](#)
[IRF100S201](#) [JANTX2N5237](#) [2SK2464-TL-E](#) [2SK3818-DL-E](#) [FCA20N60_F109](#) [FDZ595PZ](#) [STD6600NT4G](#) [FSS804-TL-E](#) [2SJ277-DL-E](#)
[2SK1691-DL-E](#) [2SK2545\(Q,T\)](#) [D2294UK](#) [405094E](#) [423220D](#) [MCH6646-TL-E](#) [TPCC8103,L1Q\(CM](#) [367-8430-0972-503](#) [VN1206L](#)
[424134F](#) [026935X](#) [051075F](#) [SBVS138LT1G](#) [614234A](#) [715780A](#) [NTNS3166NZT5G](#) [751625C](#) [873612G](#) [IRF7380TRHR](#)
[IPS70R2K0CEAKMA1](#) [RJK60S3DPP-E0#T2](#) [RJK60S5DPK-M0#T0](#) [APT5010JVFR](#) [APT12031JFLL](#) [APT12040JVR](#) [DMN3404LQ-7](#)
[NTE6400](#) [JANTX2N6796U](#) [JANTX2N6784U](#) [JANTXV2N5416U4](#) [SQM110N05-06L-GE3](#) [SIHF35N60E-GE3](#)