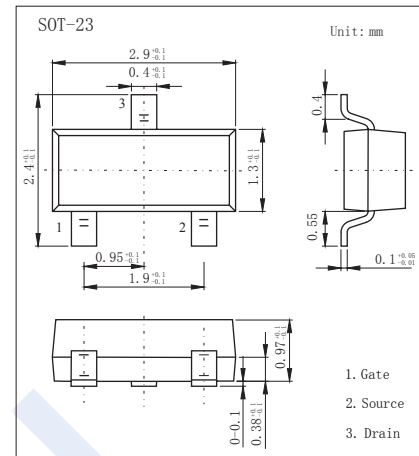
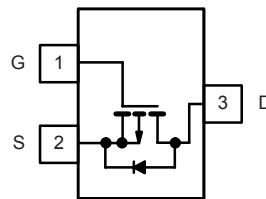


P-Channel MOSFET

SI2343DS (KI2343DS)

■ Features

- $V_{DS} (V) = -30V$
- $I_D = -4 A (V_{GS} = -10V)$
- $R_{DS(ON)} < 53m\Omega (V_{GS} = -10V)$
- $R_{DS(ON)} < 86m\Omega (V_{GS} = -4.5V)$

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

| Parameter | Symbol | 5 s | Steady State | Unit |
|---|------------|--------------------|--------------|--------------|
| Drain-Source Voltage | V_{DS} | | -30 | V |
| Gate-Source Voltage | V_{GS} | | ± 20 | |
| Continuous Drain Current | I_D | $T_A = 25^\circ C$ | -4 | A |
| | | $T_A = 70^\circ C$ | -3.2 | |
| Pulsed Drain Current | I_{DM} | | -15 | |
| 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} | 100 | 166 | $^\circ C/W$ |
| Thermal Resistance.Junction- to-Foot | R_{thJF} | | 50 | |
| Junction Temperature | T_J | | 150 | $^\circ C$ |
| Junction Storage Temperature Range | T_{stg} | | -55 to 150 | |

P-Channel MOSFET

SI2343DS (KI2343DS)

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---------------------------------------|---------------------|---|-----|-----|------|------|
| Drain-Source Breakdown Voltage | V _{DSS} | I _D =-250 μ A, 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 μ A | -1 | | -3 | V |
| Static Drain-Source On-Resistance | R _{DS(on)} | V _{GS} =-10V, I _D =-4A (Note.1) | | | 53 | mΩ |
| | | V _{GS} =-4.5V, I _D =-3.1A (Note.1) | | | 86 | |
| On state drain current | I _{D(on)} | V _{GS} =-5V, V _{DS} =-10V (Note.1) | -15 | | | A |
| Forward Transconductance | g _{FS} | V _{DS} =-5V, I _D =-4A (Note.1) | | 10 | | S |
| Input Capacitance | C _{iss} | V _{GS} =0V, V _{DS} =-15V, f=1MHz | | 540 | | pF |
| Output Capacitance | C _{oss} | | | 131 | | |
| Reverse Transfer Capacitance | C _{rss} | | | 105 | | |
| Total Gate Charge | Q _g | V _{GS} =-10V, V _{DS} =-15V, I _D =-4A | | 14 | 21 | nC |
| Gate Source Charge | Q _{gs} | | | 1.9 | | |
| Gate Drain Charge | Q _{gd} | | | 3.7 | | |
| Turn-On DelayTime | t _{d(on)} | V _{DD} = - 15 V, R _L = 15 Ω I _D = - 1A, V _{GEN} = - 10 V R _G = 6 Ω | | 10 | 15 | ns |
| Turn-On Rise Time | t _r | | | 15 | 25 | |
| Turn-Off DelayTime | t _{d(off)} | | | 31 | 50 | |
| Turn-Off Fall Time | t _f | | | 20 | 30 | |
| Maximum Body-Diode Continuous Current | I _S | | | | -1 | A |
| Diode Forward Voltage | V _{SD} | I _S =-1A, V _{GS} =0V | | | -1.2 | V |

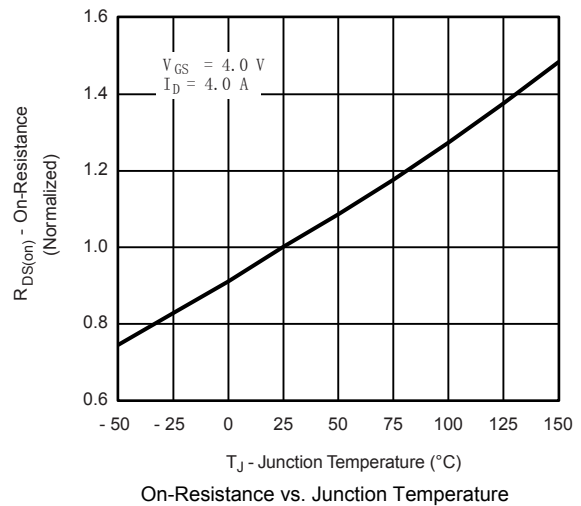
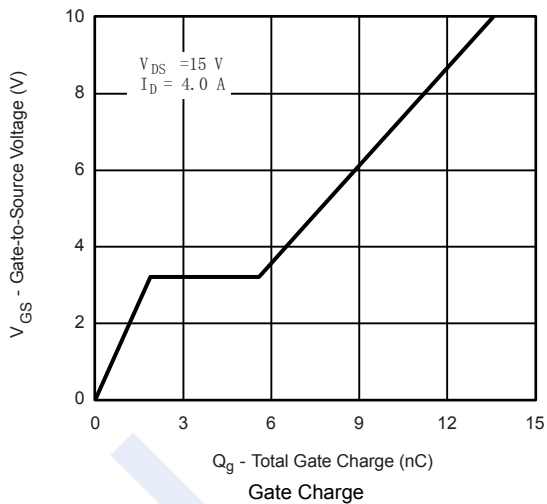
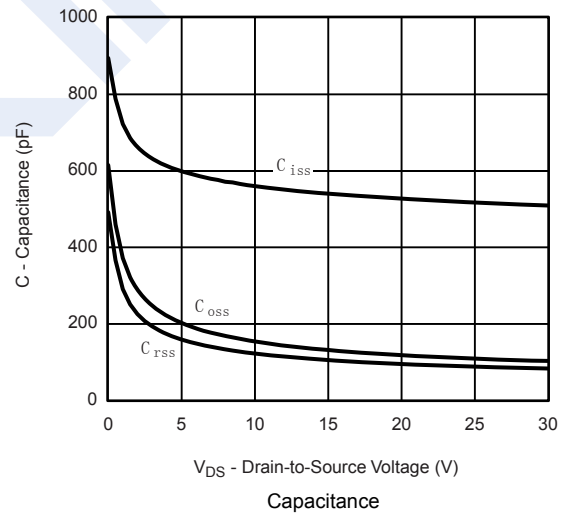
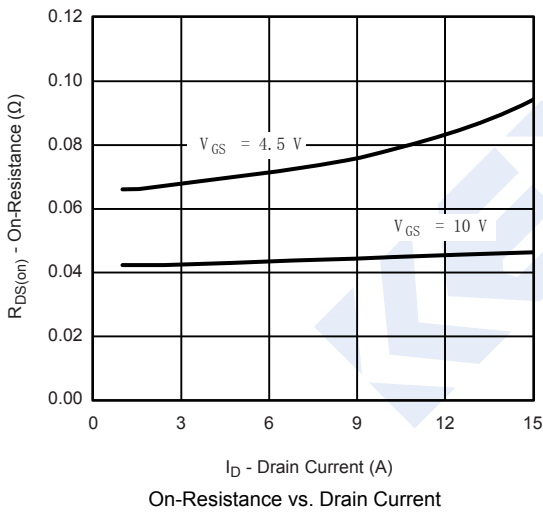
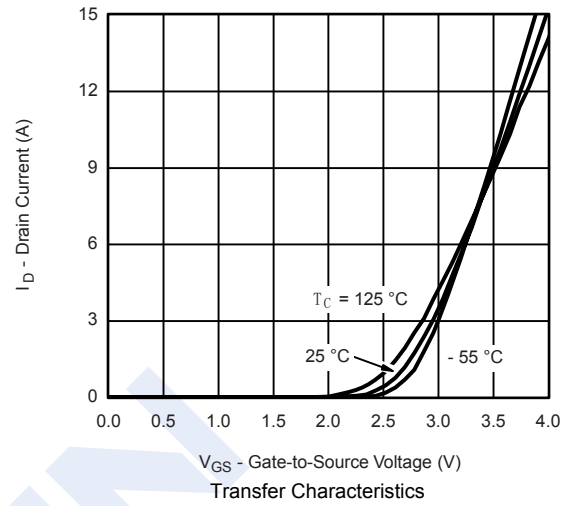
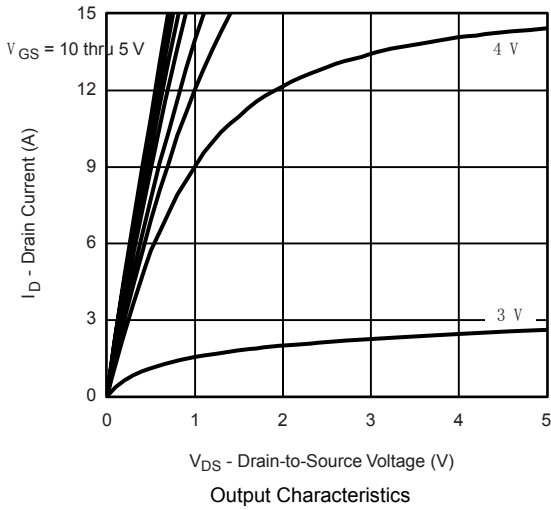
Note.1: Pulse test: PW ≤ 300 μs, duty cycle ≤ 2 %.

■ Marking

| | |
|---------|----|
| Marking | F3 |
|---------|----|

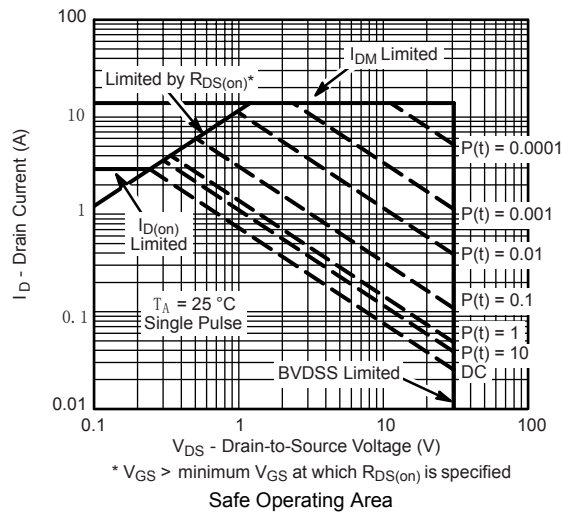
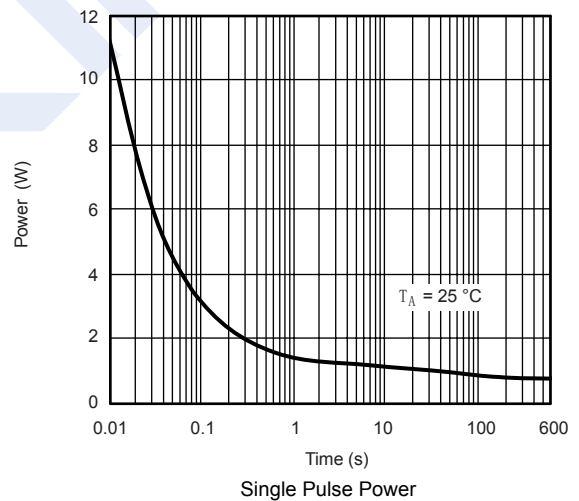
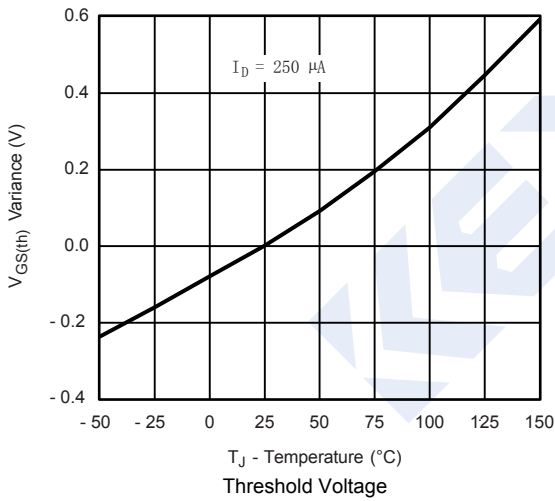
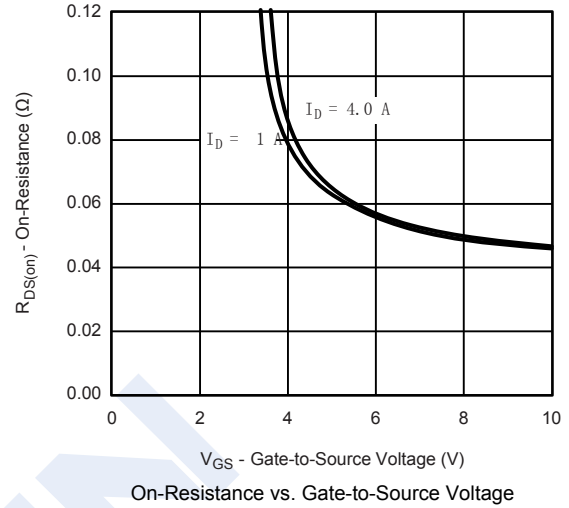
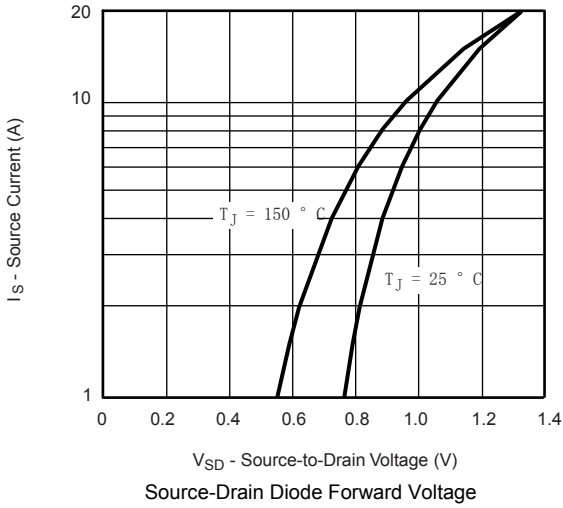
P-Channel MOSFET SI2343DS (KI2343DS)

Typical Characteristics



P-Channel MOSFET SI2343DS (KI2343DS)

Typical Characteristics



P-Channel MOSFET SI2343DS (KI2343DS)

■ Typical Characteristics

