

SANYO Semiconductors DATA SHEET

2SK2632LS-

N-Channel Silicon MOSFET

General-Purpose Switching Device Applications

Features

- · Low ON-resistance.
- · Low Qg.
- · Ultrahigh-speed switching.

Specifications

Absolute Maximum Ratings at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|-----------------------------|--------|------------------------|-------------|------|
| Drain-to-Source Voltage | VDSS | | 800 | V |
| Gate-to-Source Voltage | VGSS | | ±30 | V |
| Drain Current (DC) | ID | | 2.5 | Α |
| Drain Current (Pulse) | IDP | PW≤10μs, duty cycle≤1% | 7.5 | Α |
| Allowable Power Dissipation | D- | | 2.0 | W |
| | PD | Tc=25°C | 25 | W |
| Channel Temperature | Tch | | 150 | °C |
| Storage Temperature | Tstg | | -55 to +150 | °C |

Electrical Characteristics at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|--|----------|--|---------|-----|------|-------|
| | | | min | typ | max | OTIIL |
| Drain-to-Source Breakdown Voltage | V(BR)DSS | I _D =1mA, V _{GS} =0V | 800 | | | V |
| Zero-Gate Voltage Drain Current | IDSS | V _{DS} =800V, V _{GS} =0V | | | 1.0 | mA |
| Gate-to-Source Leakage Current | IGSS | VGS=±30V, VDS=0V | | | ±100 | nA |
| Cutoff Voltage | VGS(off) | V _{DS} =10V, I _D =1mA | 3.5 | | 5.5 | V |
| Forward Transfer Admittance | yfs | V _{DS} =10V, I _D =1.3A | 0.7 | 1.4 | | S |
| Static Drain-to-Source On-State Resistance | RDS(on) | ID=1.3A, VGS=15V | | 3.6 | 4.8 | Ω |

Marking: K2632 Continued on next page.

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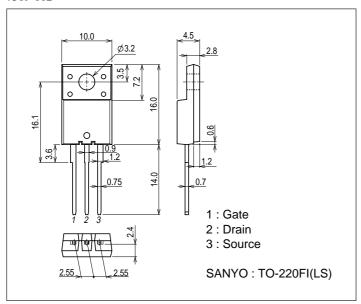
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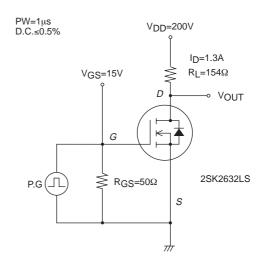
| Parameter | Symbol | Conditions | Ratings | | | Unit |
|------------------------------|----------------------|---|---------|------|-----|------|
| | | | min | typ | max | Oill |
| Input Capacitance | Ciss | V _{DS} =20V, f=1MHz | | 550 | | pF |
| Output Capacitance | Coss | V _{DS} =20V, f=1MHz | | 150 | | pF |
| Reverse Transfer Capacitance | Crss | V _{DS} =20V, f=1MHz | | 70 | | pF |
| Total Gate Charge | Qg | V _{DS} =200V, I _D =2.5A, V _{GS} =10V | | 15 | | nC |
| Turn-ON Delay Time | t _d (on) | See specified Test Circuit. | | 15 | | ns |
| Rise Time | t _r | See specified Test Circuit. | | 15 | | ns |
| Turn-OFF Delay Time | t _d (off) | See specified Test Circuit. | | 45 | | ns |
| Fall Time | tf | See specified Test Circuit. | | 23 | | ns |
| Diode Forward Voltage | V _{SD} | I _S =2.5A, V _{GS} =0V | | 0.84 | 1.2 | V |

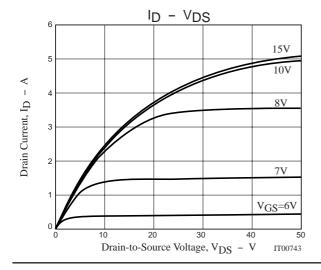
Package Dimensions

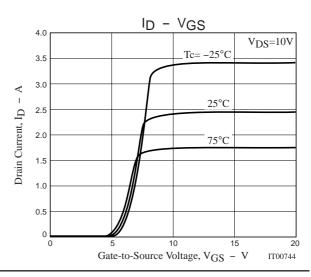
unit : mm (typ) 7509-002

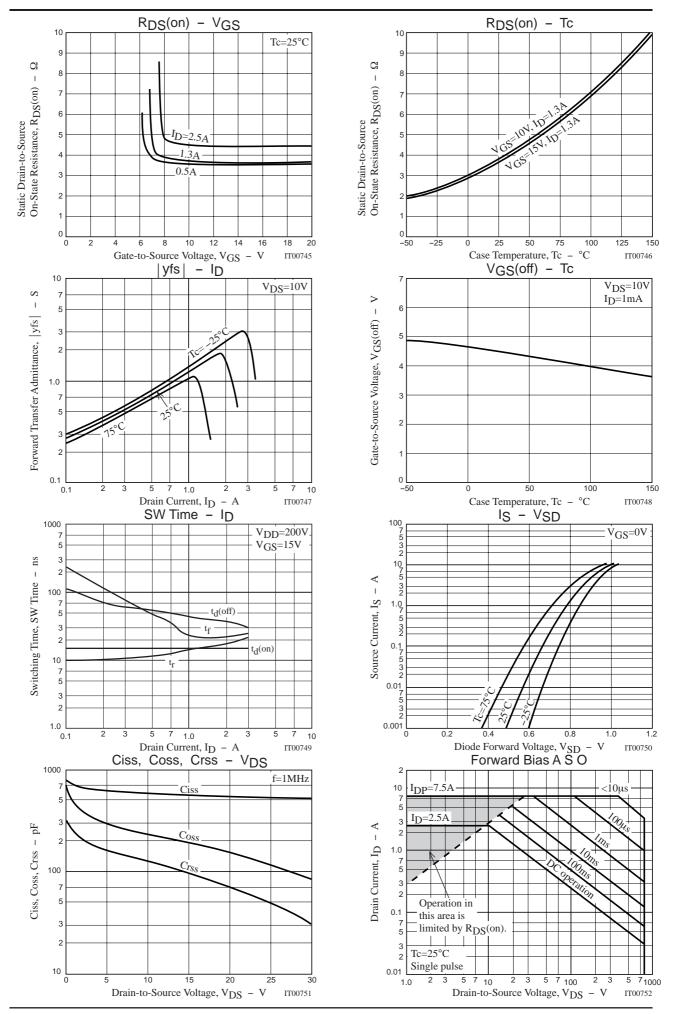


Switching Time Test Circuit

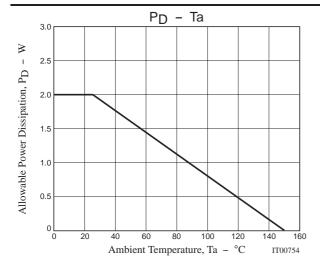


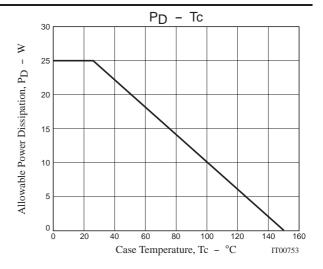






2SK2632LS





Note on usage : Since the 2SK2632LS is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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