Ordering number:EN3137

N-Channel Junction Silicon FET

2SK1332

Low-Frequency General-Purpose Amplifier Applications

Applications

· Ideal for use in variable resistors, analog switches, low-frequency amplifiers, and constant-current circuits.

Features

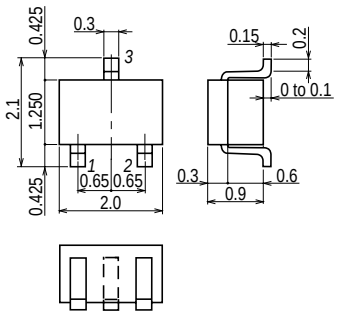
· Ultrasmall-sized package permitting 2SK1332-applied sets to be made smaller and slimmer.

Package Dimensions

unit:mm

2058

[2SK1332]



1 : Source
2 : Drain
3 : Gate
SANYO : MCP

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSX}		30	V
Gate-to-Drain Voltage	V_{GDS}		–30	V
Gate Current	I_G		10	mA
Drain Current	I_D		20	mA
Allowable Power Dissipation	P_D		150	mW
Junction Temperature	Tj		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	I_G=–10μA, V_{DS}=0	–30			V
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=–20V, V_{DS}=0			–1.0	nA
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=10V, V_{GS}=0V	0.6*		6.0*	mA
Cutoff Voltage	$V_{GS(off)}$	V_{DS}=10V, I_D=1μA	–0.2	–0.7	–2.5	V
Forward Transfer Admittance	| yfs |	V_{DS}=10V, V_{GS}=0V, f=1kHz	2.5	5.0		mS

* : The 2SK1332 is classified by I_{DSS} as follows (unit : mA) :

0.6	2	1.5	1.2	3	3.0	2.5	4	6.0

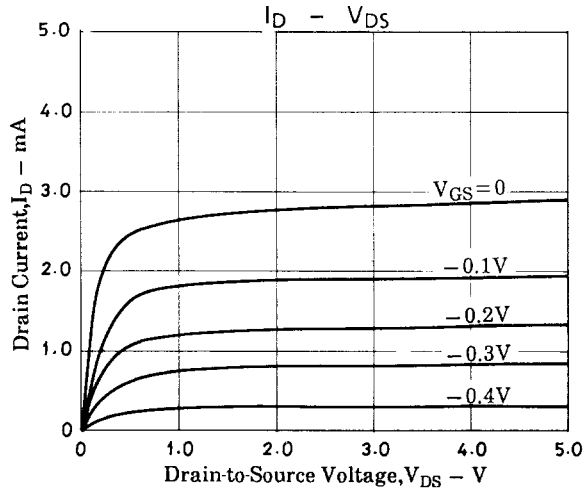
Continued on next page.

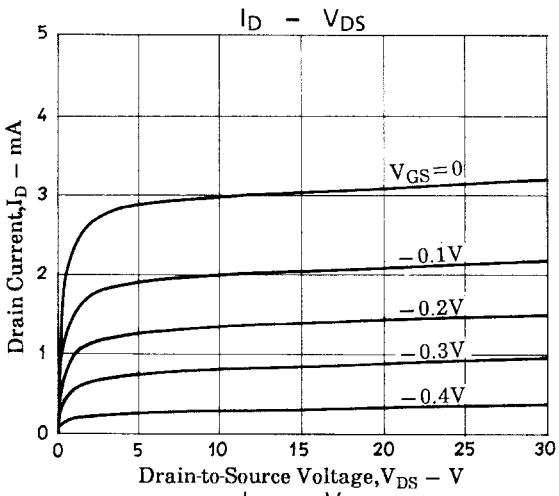
(Note) Marking : V
I_{DSS} rank : 2, 3, 4
• For CP package version, use the 2SK303.

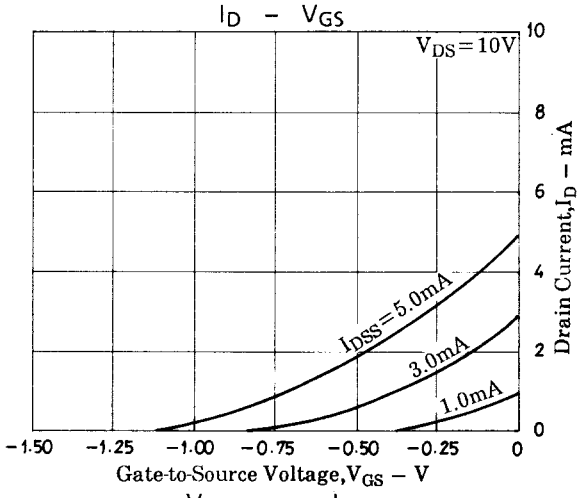
SANYO Electric Co.,Ltd. Semiconductor Company
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

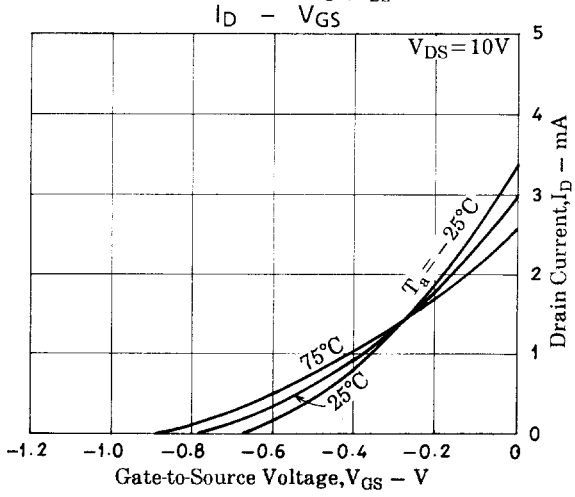
Continued from preceding page.

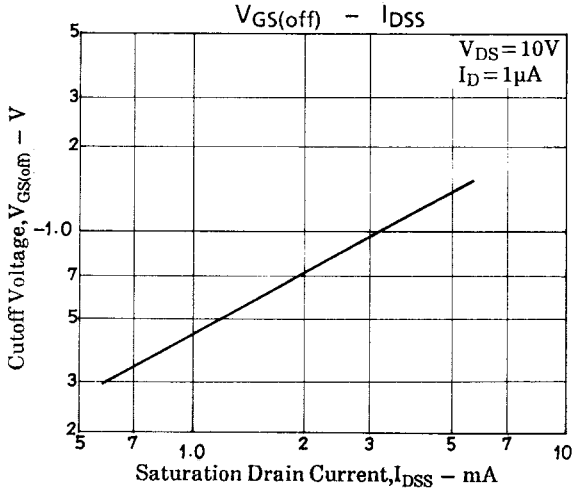
Parameter	Symbol	Conditions	Ratings			Unit
Input Capacitance	Ciss	V_{DS}=10V, V_{GS}=0V, f=1MHz		5.0		pF
Reverse Transfer Capacitance	Crss	V_{DS}=10V, V_{GS}=0V, f=1MHz		0.9		pF

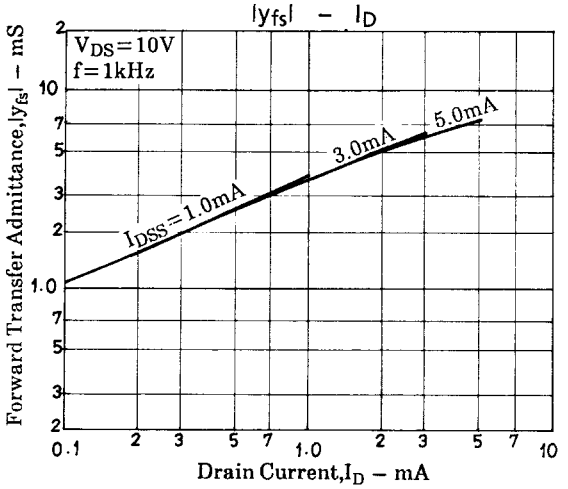


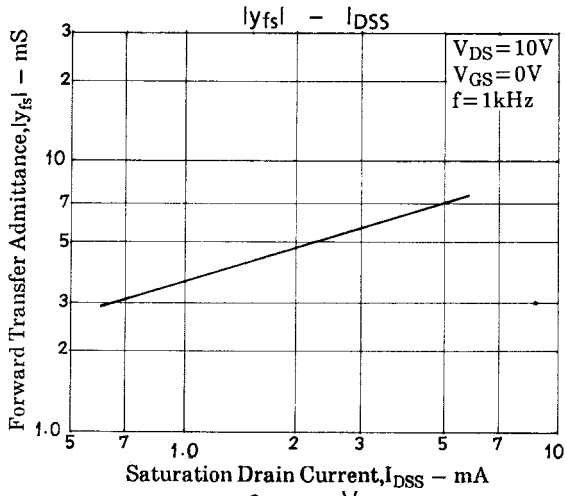


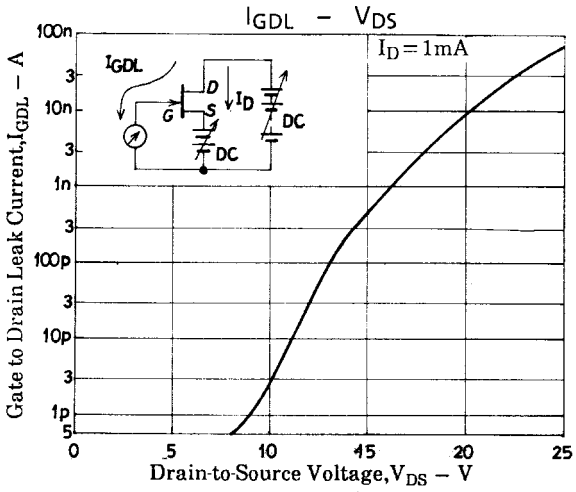


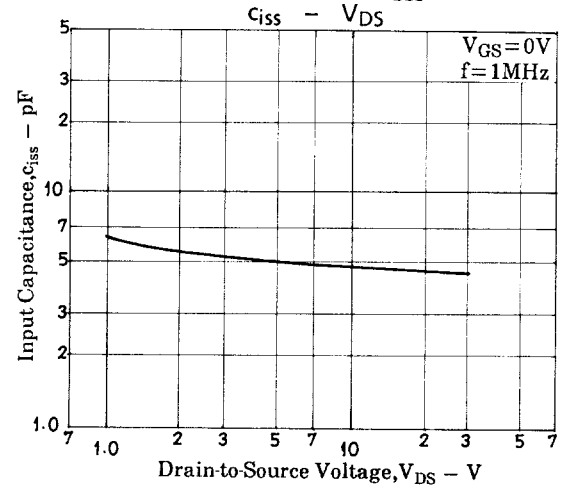


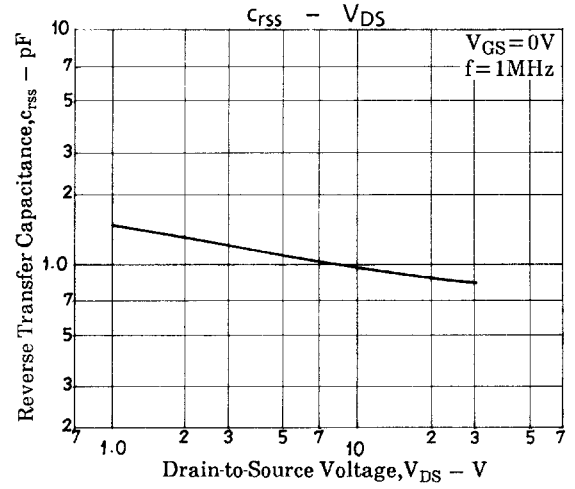


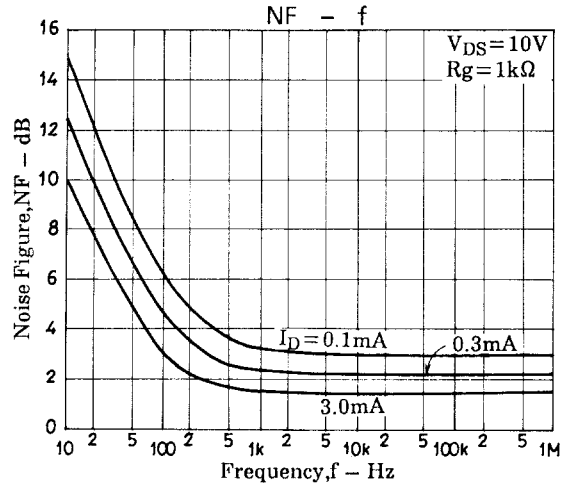


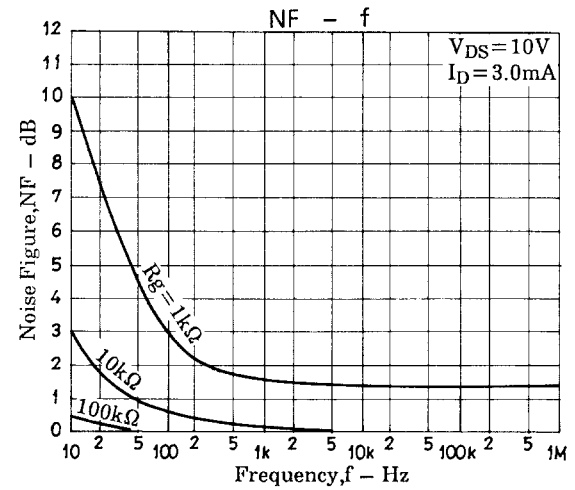

|yfs| – IDSS
VDS=10V
VGS=0V
f=1kHz
Forward Transfer Admittance,|yfs| – mS
Saturation Drain Current,IDSS – mA

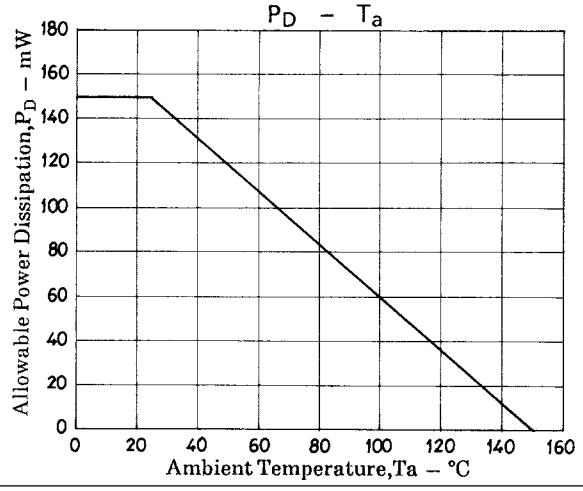

IGDL – VDS
ID=1mA
IGDL
D
G
S
ID
DC
DC
Gate to Drain Leak Current,IGDL – A
Drain-to-Source Voltage,VDS – V


Ciss – VDS
VGS=0V
f=1MHz
Input Capacitance,Ciss – pF
Drain-to-Source Voltage,VDS – V


Crss – VDS
VGS=0V
f=1MHz
Reverse Transfer Capacitance,Crss – pF
Drain-to-Source Voltage,VDS – V


NF – f
VDS=10V
Rg=1kΩ
ID=0.1mA
0.3mA
3.0mA
Noise Figure,NF – dB
Frequency,f – Hz


NF – f
VDS=10V
ID=3.0mA
Rg=1kΩ
10kΩ
100kΩ
Noise Figure,NF – dB
Frequency,f – Hz


PD – Ta
Allowable Power Dissipation,PD – mW
Ambient Temperature,Ta – °C