Ordering number : EN8158C

2SK3666

N-Channel JFET
30V, 0.6 to 3.0mA, 6.5mS, CP

ON Semiconductor

http://onsemi.com

Applications

- Low-frequency general-purpose amplifier, impedance conversion, infrared sensor applications

Features

- Small IGSS
- Small Ciss

Specifications

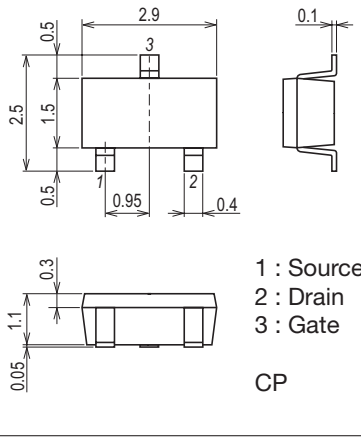
Absolute Maximum Ratings at Ta=25°C

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		10	mA
Allowable Power Dissipation	P_D		200	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		−55 to +150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

Package Dimensions

unit : mm (typ)
7013A-011

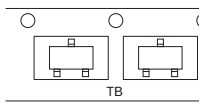


2SK3666-2-TB-E
2SK3666-3-TB-E

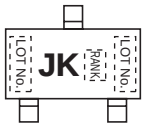
Product & Package Information

- Package : CP
- JEITA, JEDEC : SC-59, TO-236, SOT-23, TO-236AB
- Minimum Packing Quantity : 3,000 pcs./reel

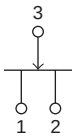
Packing Type: TL



Marking



Electrical Connection



ORDERING INFORMATION
See detailed ordering and shipping information on page 2 of this data sheet.

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}=0V	−30			V
Gate Cutoff Current	I_{GSS}	V_{GS}=−20V, V_{DS}=0V			−1.0	nA
Cutoff Voltage	V_{GS}(off)	V_{DS}=10V, I_D=1μA	−0.18	−0.95	−2.2	V
Drain Current	I_{DSS}	V_{DS}=10V, V_{GS}=0V	0.6*		3.0*	mA
Forward Transfer Admittance	| yfs |	V_{DS}=10V, V_{GS}=0V, f=1kHz	3.0	6.5		mS
Input Capacitance	Ciss	V_{DS}=10V, V_{GS}=0V, f=1MHz		4		pF
Reverse Transfer Capacitance	Crss	V_{DS}=10V, V_{GS}=0V, f=1MHz		1.1		pF
Static Drain-to-Source On-State Resistance	R_{DS}(on)	V_{DS}=10mV, V_{GS}=10V		200		Ω

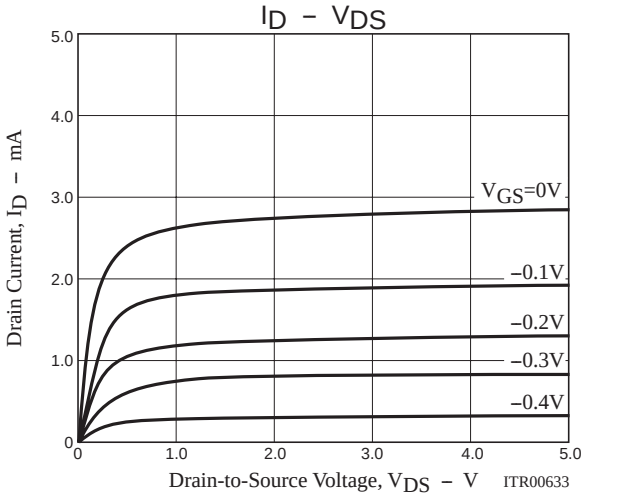
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

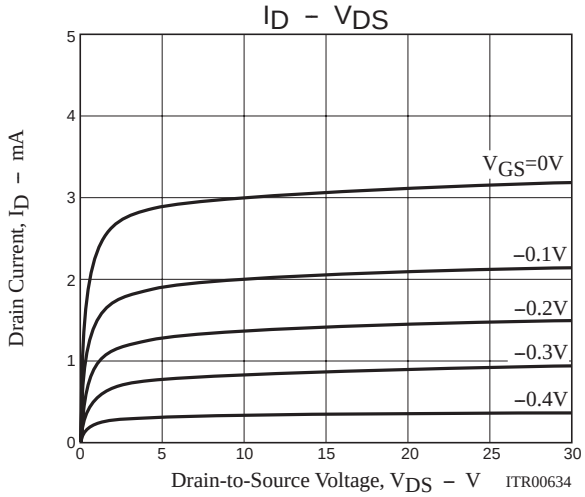
* : The 2SK3666 is classified by I_{DSS} as follows : (unit : mA)

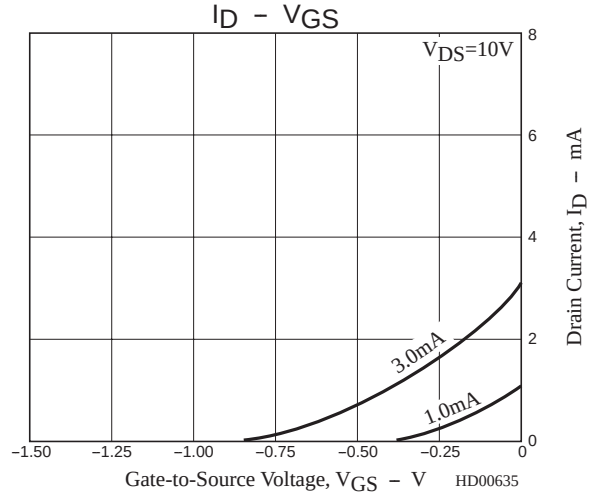
Rank	2	3
I_{DSS}	0.6 to 1.5	1.2 to 3.0

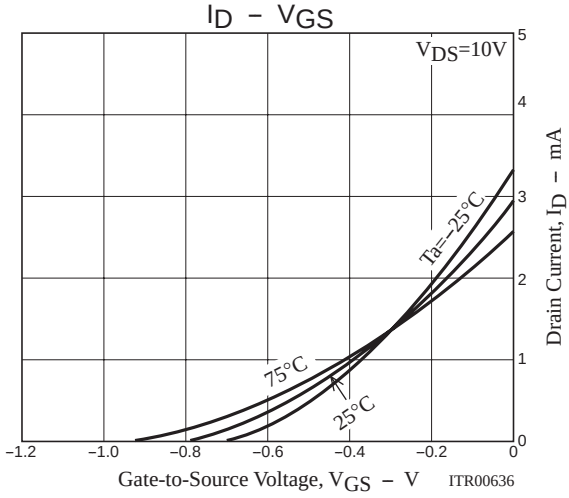
Ordering Information

Device	Package	Shipping	memo
2SK3666-2-TB-E	CP	3,000pcs./reel	Pb Free
2SK3666-3-TB-E	CP	3,000pcs./reel	

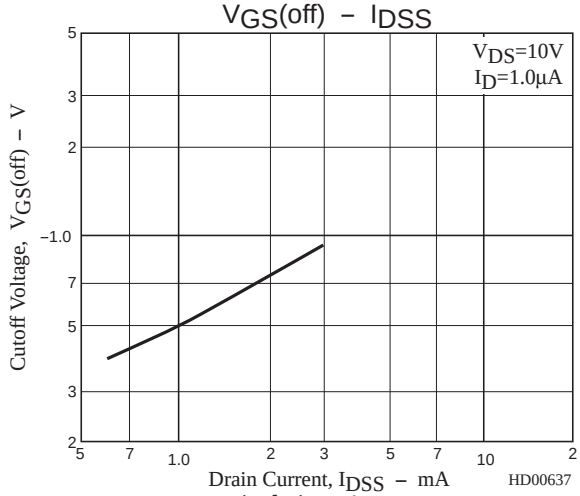




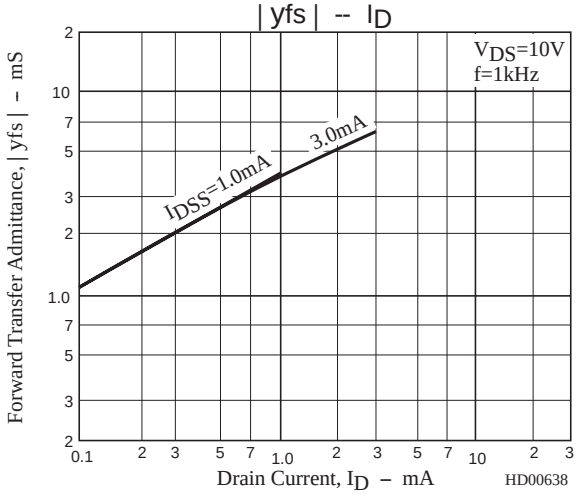




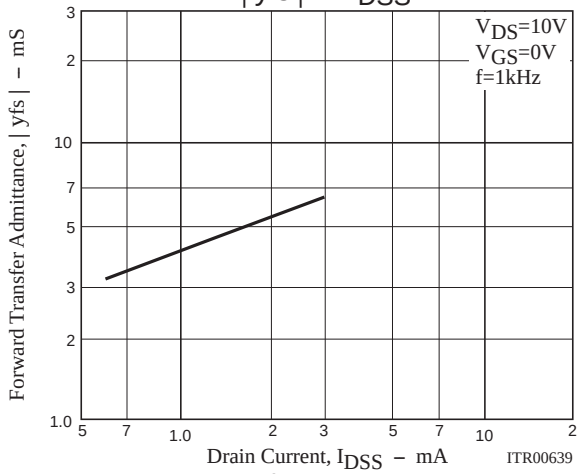
$V_{GS(off)}$ – I_{DSS}



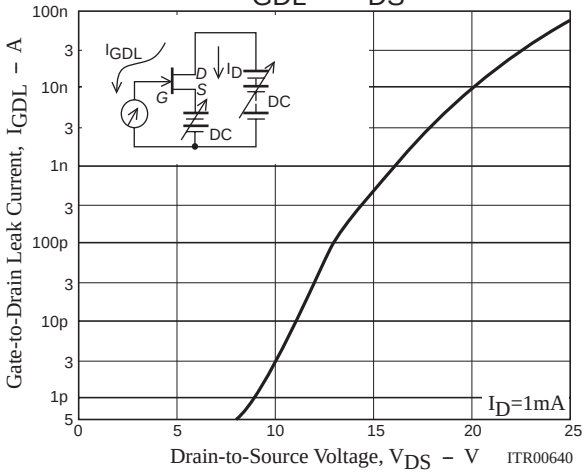
| yfs | -- I_D



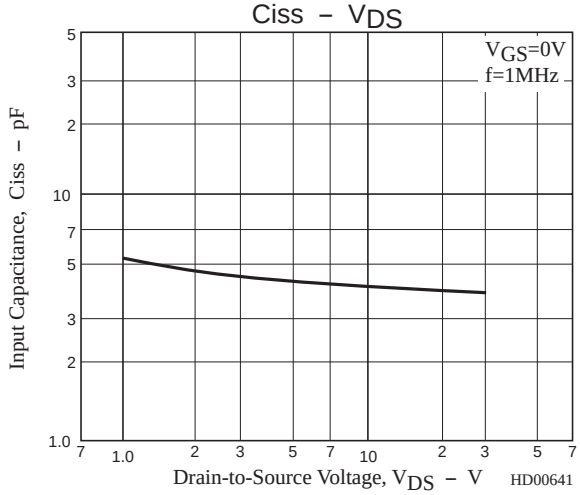
| yfs | -- I_{DSS}



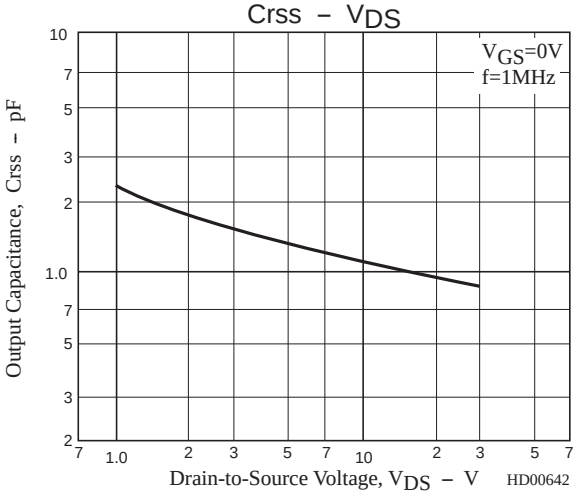
I_{GDL} – V_{DS}



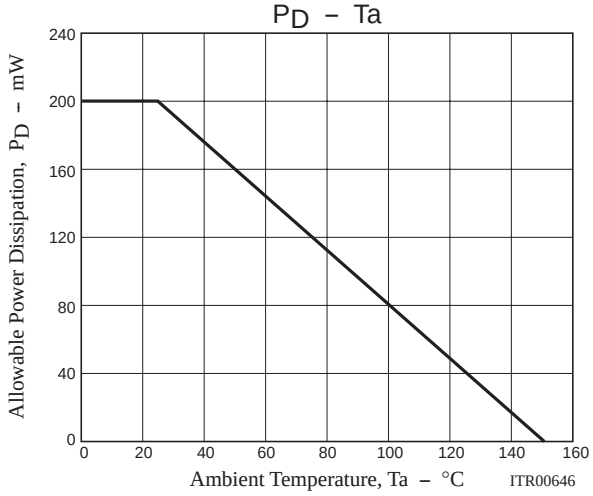
Ciss – V_{DS}



Crss – V_{DS}

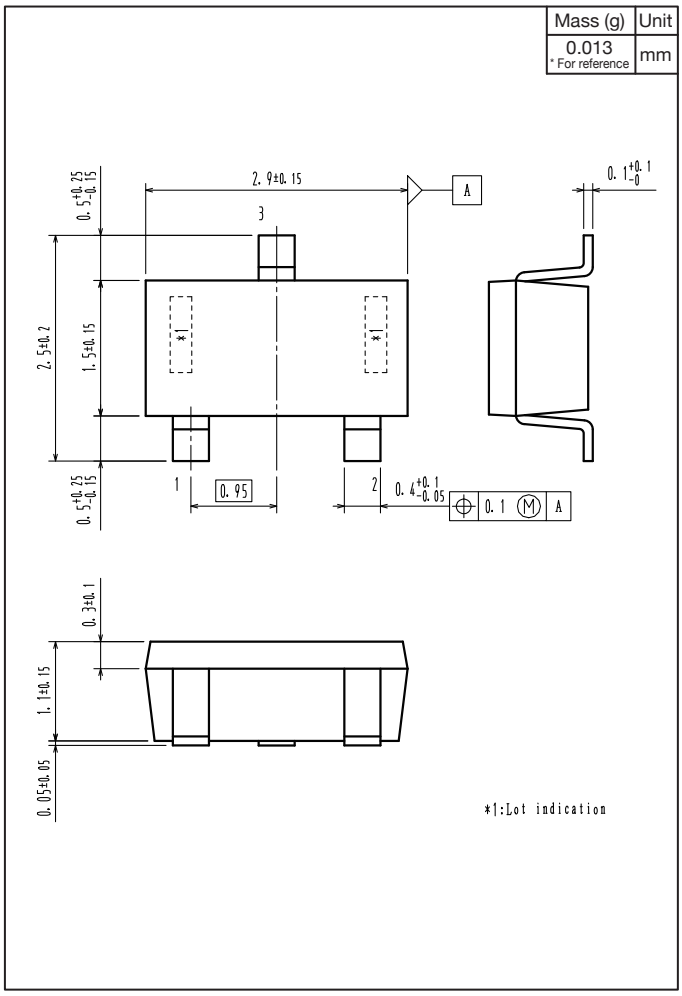


P_D – Ta

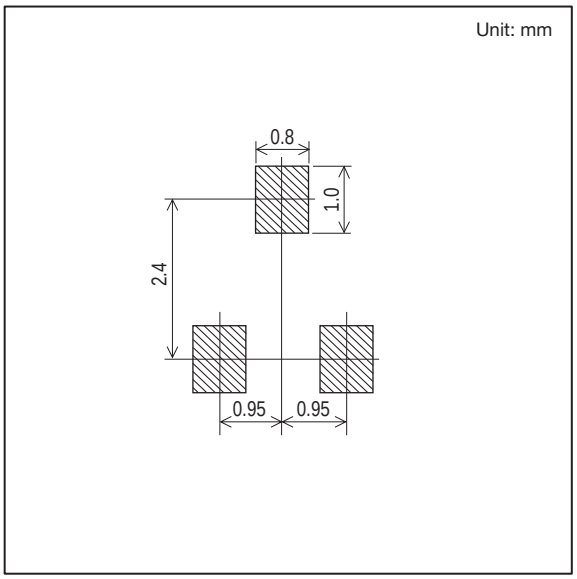


Outline Drawing

2SK3666-2-TB-E, 2SK3666-3-TB-E



Land Pattern Example



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