



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

N-Channel Junction Silicon FET

2SK3666 — Low-Frequency General-Purpose Amplifier, Impedance Converter Applications

Applications

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

Features

- Small IGSS
- Small Ciss

Specifications

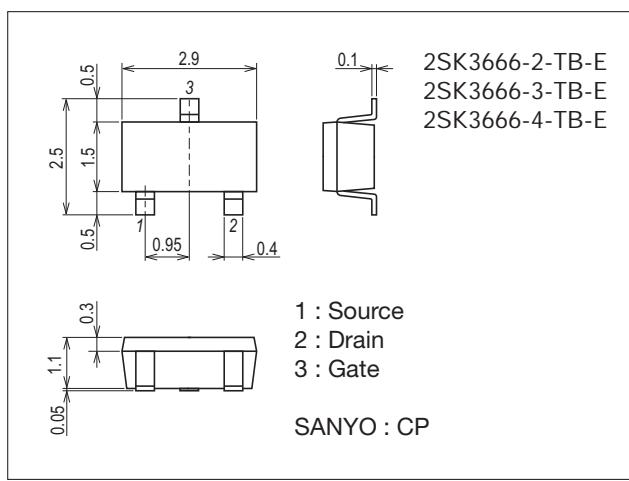
Absolute Maximum Ratings at Ta=25°C

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	T _j		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Package Dimensions

unit : mm (typ)

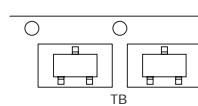
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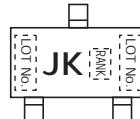
Product & Package Information

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

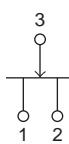
Packing Type: TL



Marking



Electrical Connection



Electrical Characteristics at $T_a=25^\circ\text{C}$

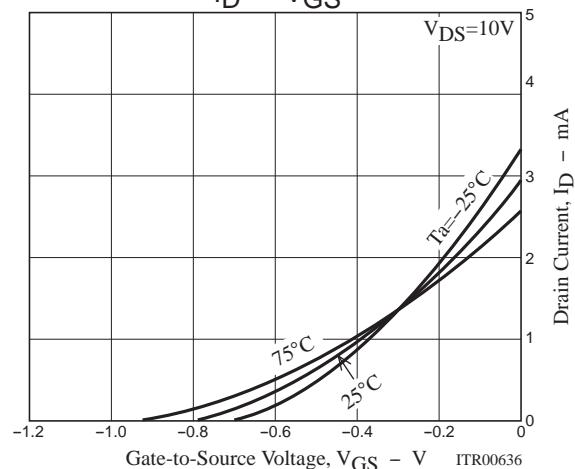
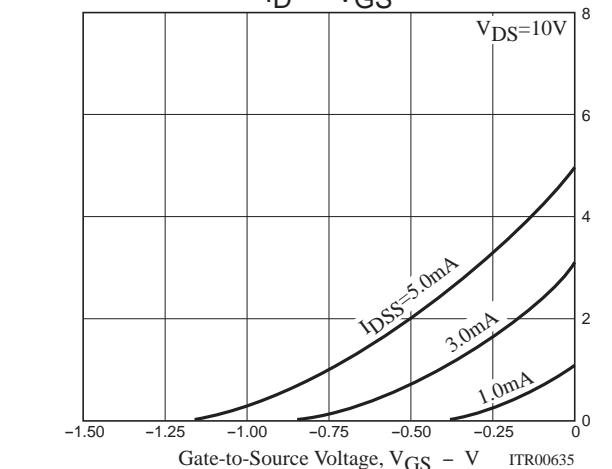
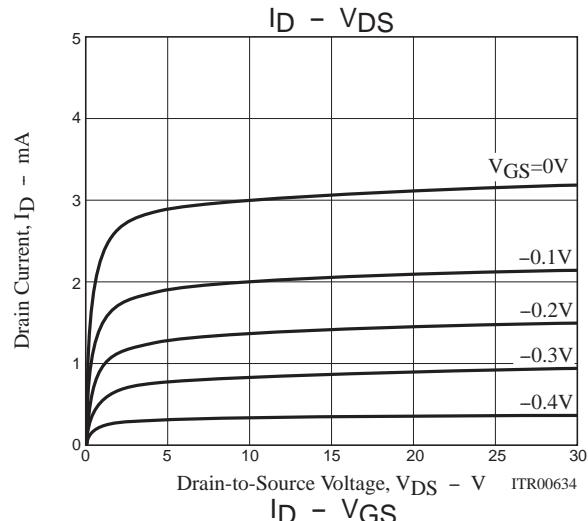
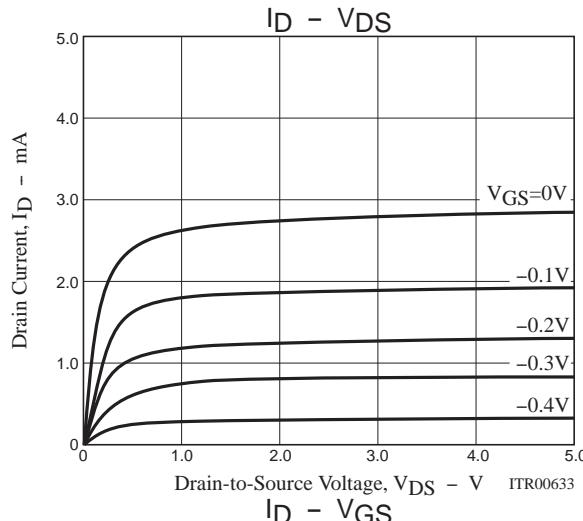
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(\text{BR})\text{GDS}}$	$I_G=-10\mu\text{A}, V_{DS}=0\text{V}$	-30			V
Gate Cutoff Current	I_{GSS}	$V_{GS}=-20\text{V}, V_{DS}=0\text{V}$			-1.0	nA
Cutoff Voltage	$V_{GS(\text{off})}$	$V_{DS}=10\text{V}, I_D=1\mu\text{A}$	-0.18	-0.95	-2.2	V
Drain Current	I_{DSS}	$V_{DS}=10\text{V}, V_{GS}=0\text{V}$	0.6*		6.0*	mA
Forward Transfer Admittance	$ y_{\text{fs}} $	$V_{DS}=10\text{V}, V_{GS}=0\text{V}, f=1\text{kHz}$	3.0	6.5		mS
Input Capacitance	C_{iss}	$V_{DS}=10\text{V}, V_{GS}=0\text{V}, f=1\text{MHz}$		4		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=10\text{V}, V_{GS}=0\text{V}, f=1\text{MHz}$		1.1		pF
Static Drain-to-Source On-State Resistance	$R_{DS(\text{on})}$	$V_{DS}=10\text{mV}, V_{GS}=10\text{V}$		200		Ω

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

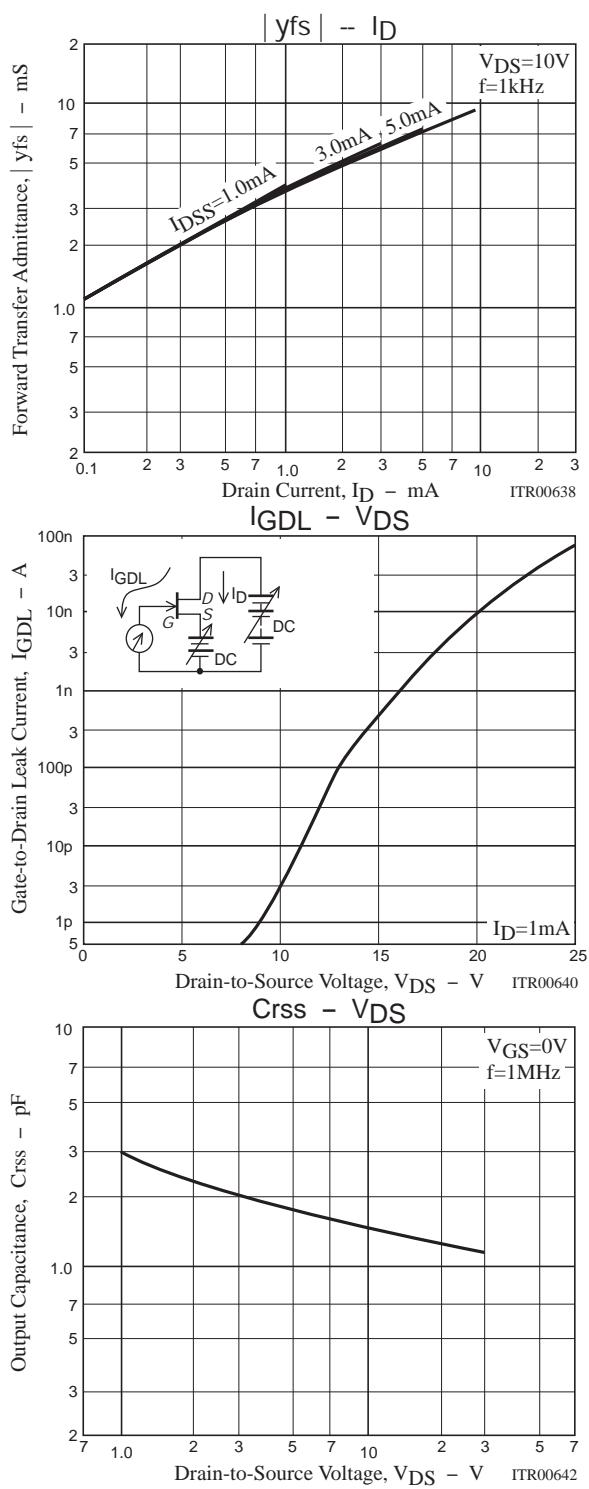
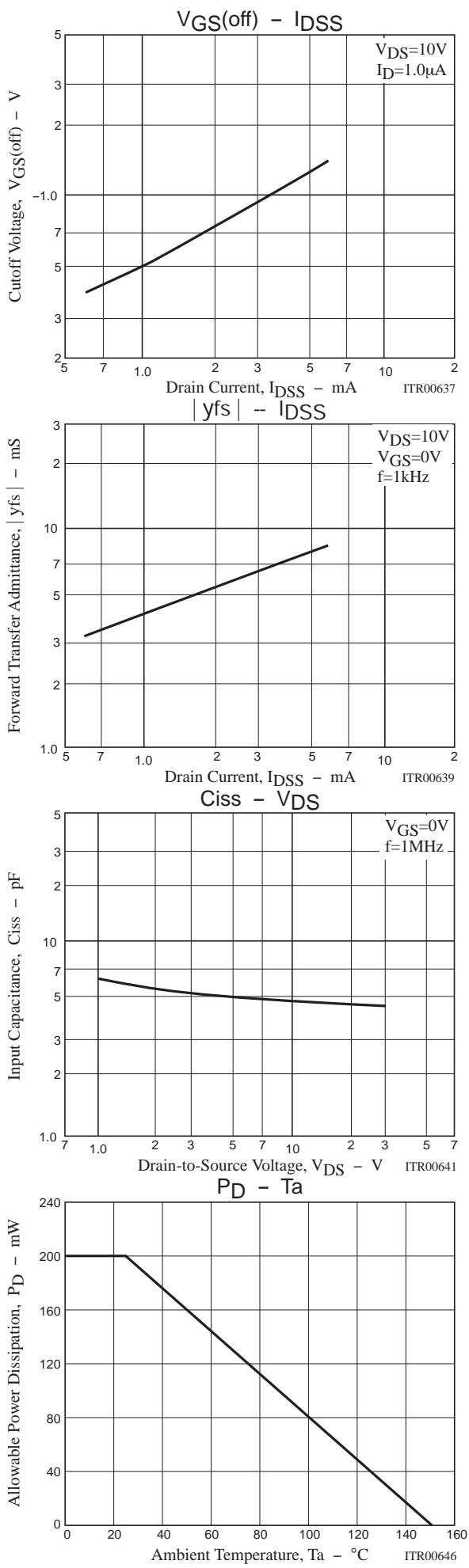
Rank	2	3	4
I_{DSS}	0.6 to 1.5	1.2 to 3.0	2.5 to 6.0

Ordering Information

Device	Package	Shipping	memo
2SK3666-2-TB-E	CP	3,000pcs./reel	Pb Free
2SK3666-3-TB-E	CP	3,000pcs./reel	
2SK3666-4-TB-E	CP	3,000pcs./reel	



2SK3666

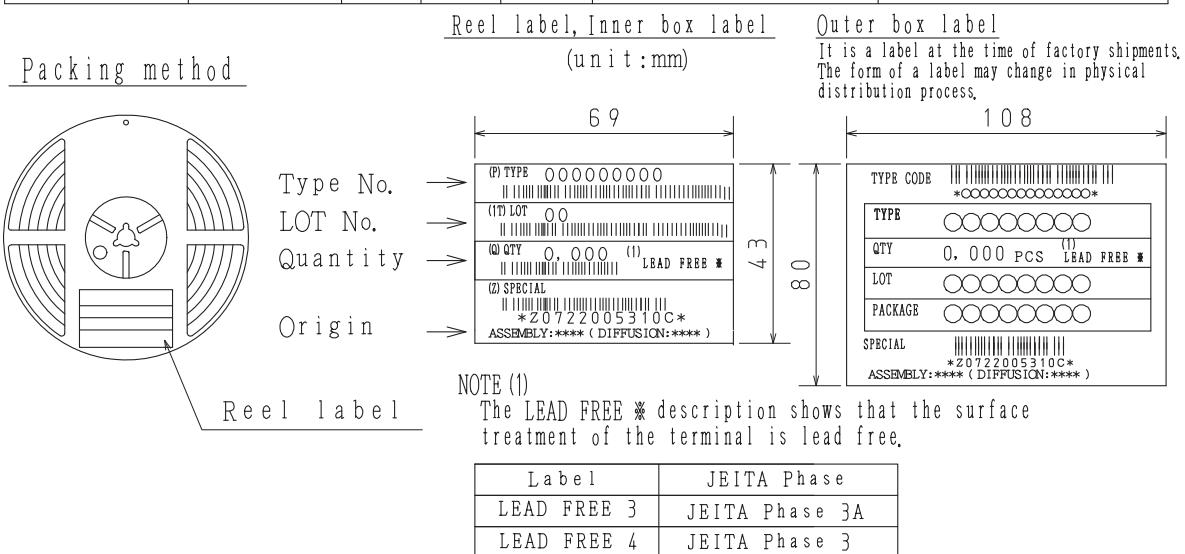


Embossed Taping Specification

2SK3666-2-TB-E, 2SK3666-3-TB-E, 2SK3666-4-TB-E

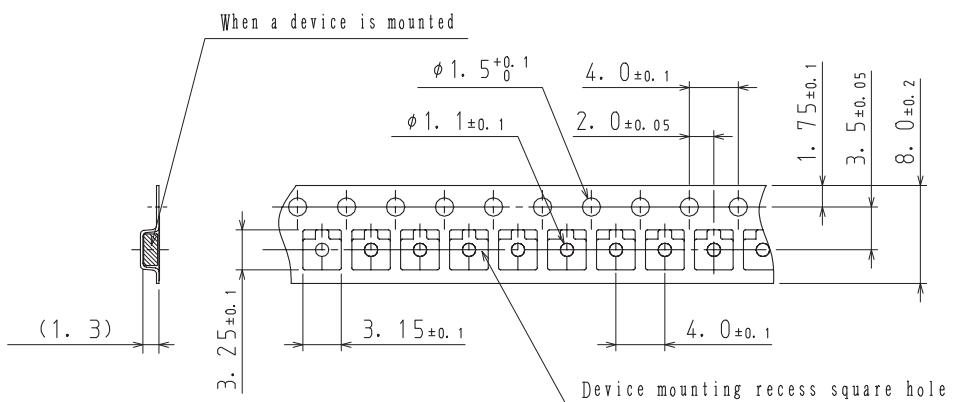
1. Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CP	CP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

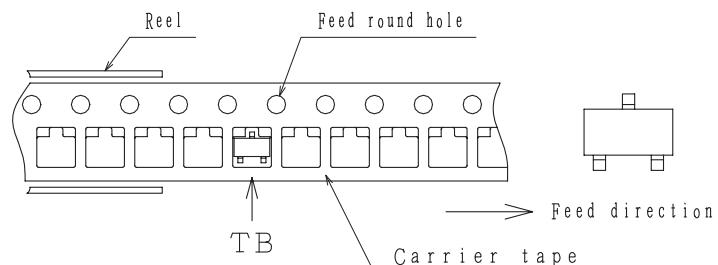


2. Taping configuration

2-1. Carrier tape size (unit:mm)

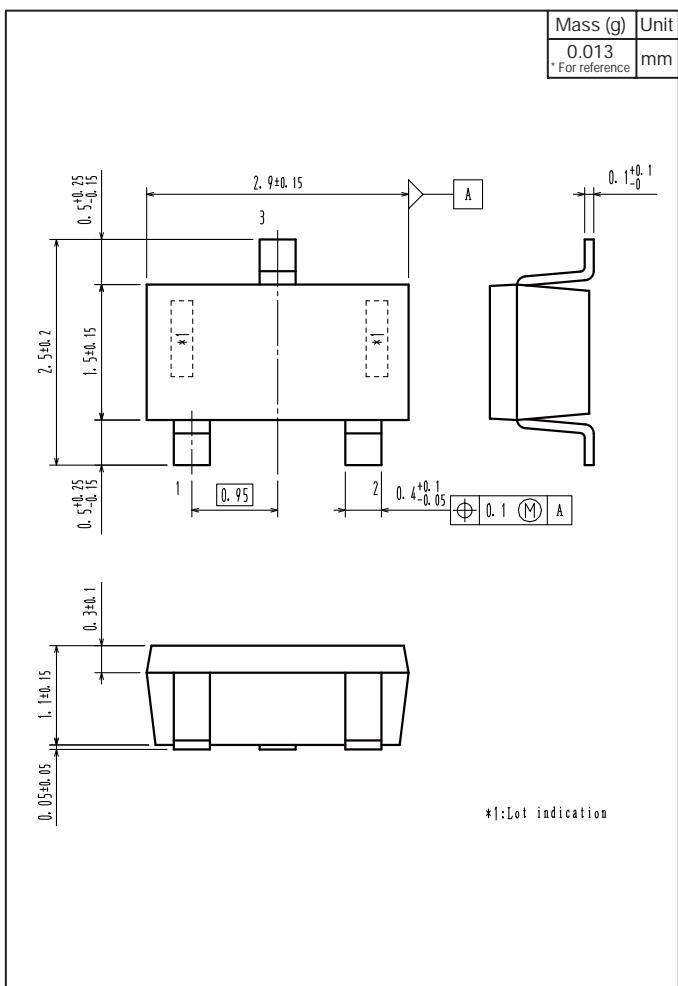


2-2. Device placement direction

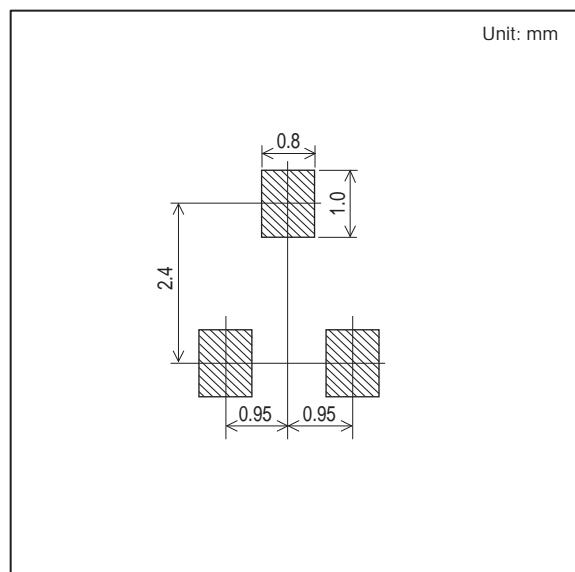


Outline Drawing

2SK3666-2-TB-E, 2SK3666-3-TB-E, 2SK3666-4-TB-E



Land Pattern Example



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