



SANYO Semiconductors

# DATA SHEET

An ON Semiconductor Company

## 2SK545 — N-Channel Junction Silicon FET Impedance Converter Applications

### Applications

- Impedance converter applications
- Infrared sensor

### Features

- Small IGSS
- Small Ciss
- Ultrasmall package permitting 2SK545-applied sets to be compact

### Specifications

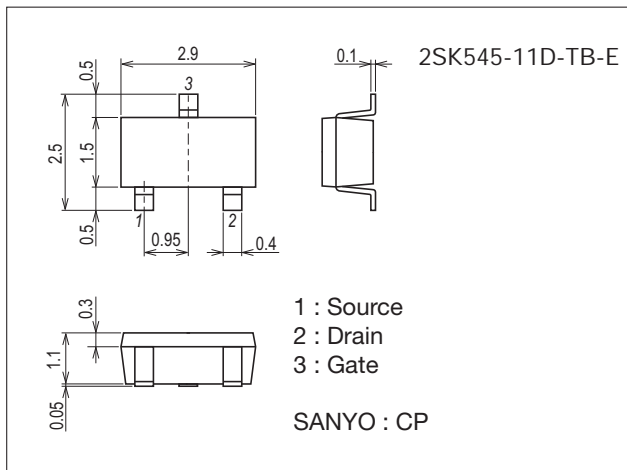
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSS</sub>		40	V
Gate-to-Drain Voltage	V <sub>GDS</sub>		-40	V
Gate Current	I <sub>G</sub>		10	mA
Drain Current	I <sub>D</sub>		1	mA
Allowable Power Dissipation	P <sub>D</sub>		100	mW
Junction Temperature	T <sub>J</sub>		125	°C
Storage Temperature	T <sub>stg</sub>		-55 to +125	°C

### Package Dimensions

unit : mm (typ)

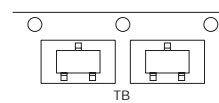
7013A-011



### Product & Package Information

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

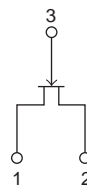
### Packing Type: TB



### Marking



### Electrical Connection



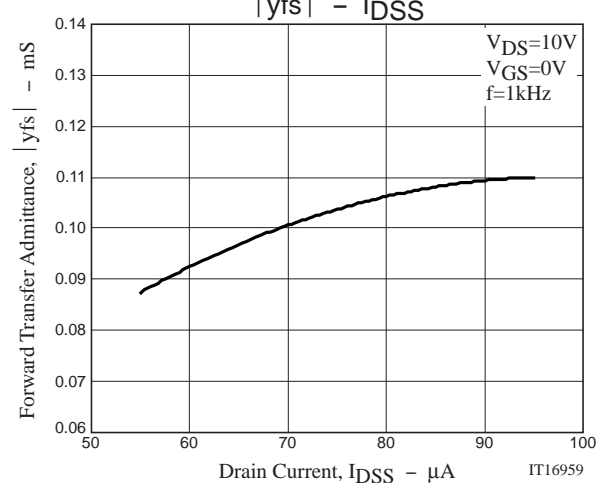
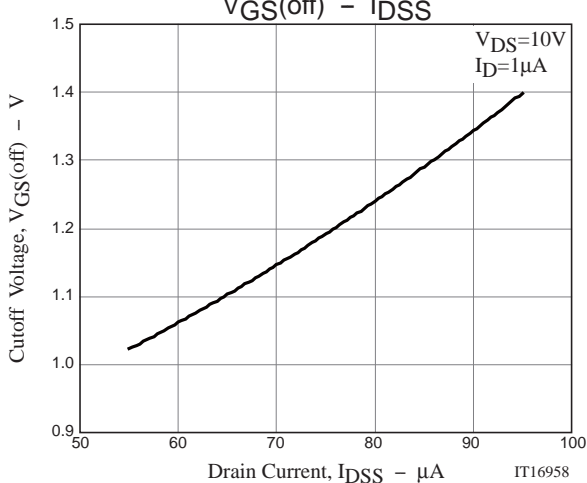
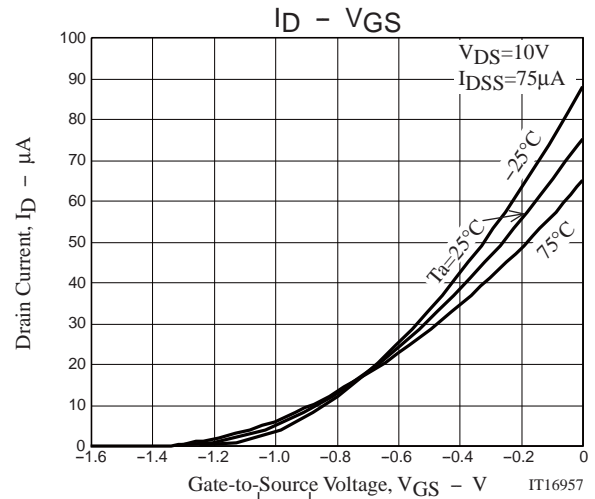
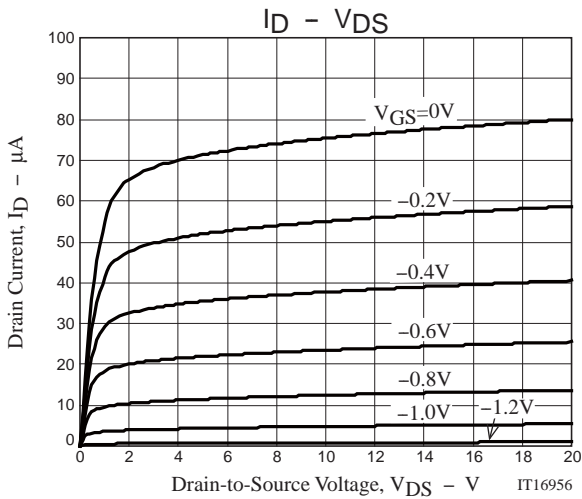
# 2SK545

## Electrical Characteristics at Ta=25°C

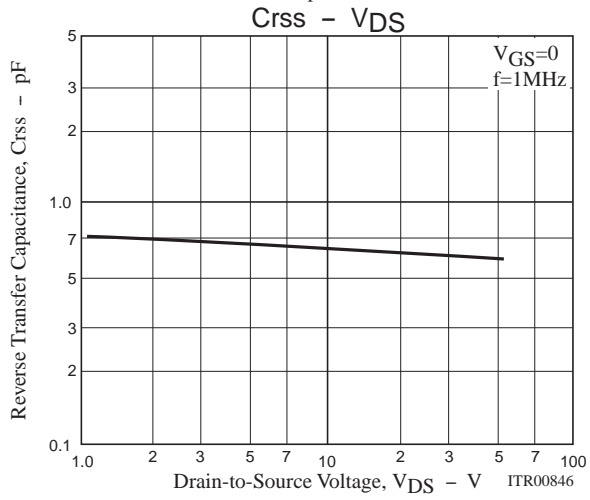
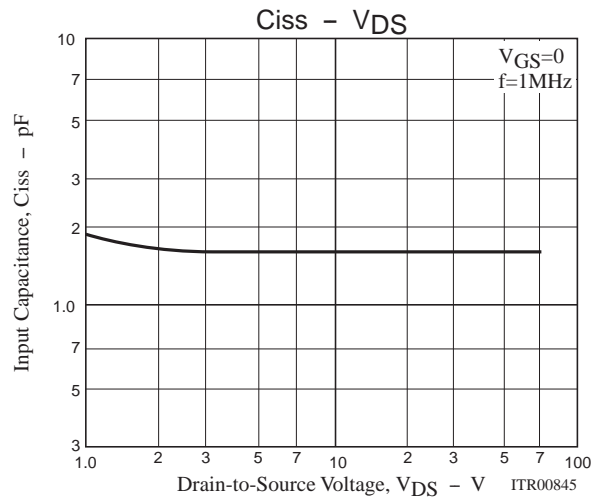
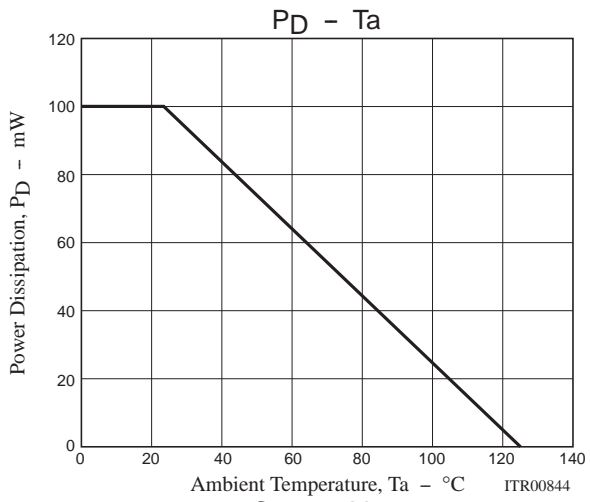
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V(BR)GDS	I <sub>D</sub> =-10μA, V <sub>DS</sub> =0V	-40			V
Gate Cutoff Current	I <sub>GSS</sub>	V <sub>GS</sub> =-20V, V <sub>DS</sub> =0V			-500	pA
Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V	55		95	μA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =1μA		-1.2	-4.0	V
Forward Transfer Admittance	y <sub>fs</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V, f=1kHz	0.05	0.10		mS
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V, f=1MHz		1.7		pF
Reverse Transfer Capacitance	C <sub>rss</sub>			0.7		pF

## Ordering Information

Device	Package	Shipping	memo
2SK545-11D-TB-E	CP	3,000pcs./reel	Pb Free



# 2SK545



Embossed Taping Specification

2SK545-11D-TB-E

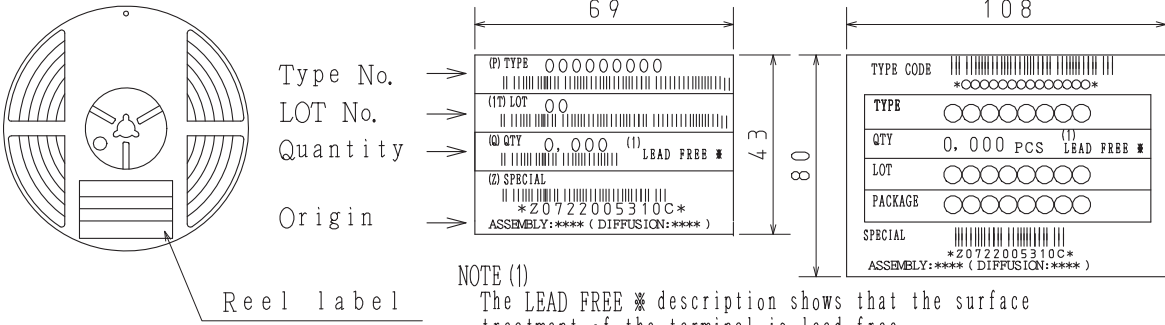
1. Packing Format

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

Packing method

Reel label, Inner box label (unit:mm)      Outer box label

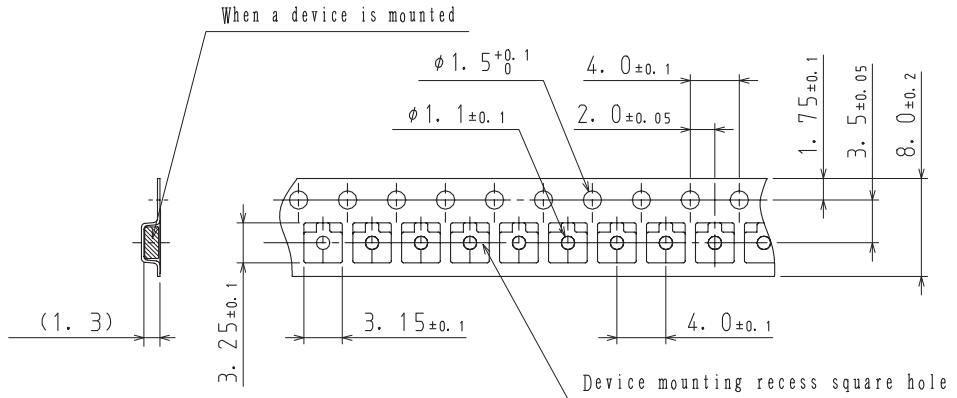
It is a label at the time of factory shipments. The form of a label may change in physical distribution process.



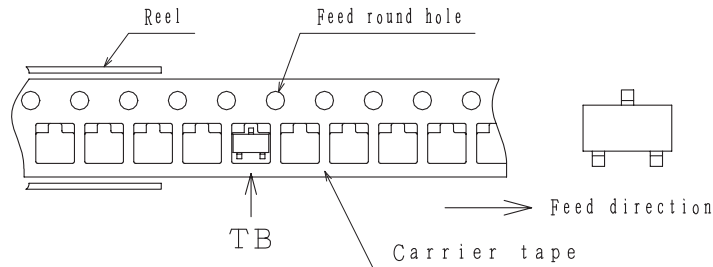
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



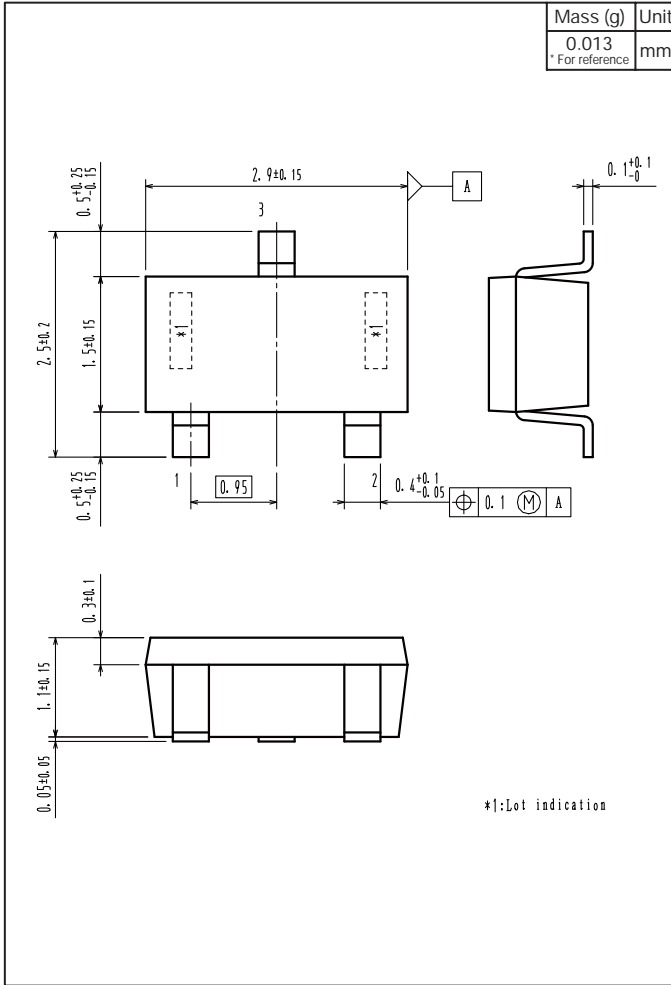
2-2. Device placement direction



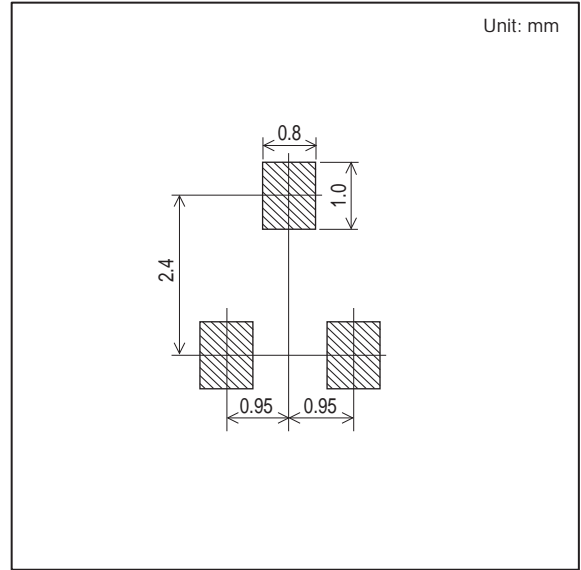
Those with one electrode terminal on the feed hole side.....TB

# 2SK545

## Outline Drawing 2SK545-11D-TB-E



## Land Pattern Example



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