



# 2SK545

## N-Channel JFET 40V, 55 to 95 $\mu$ A, 0.10mS, CP

**ON Semiconductor®**
<http://onsemi.com>

### 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**

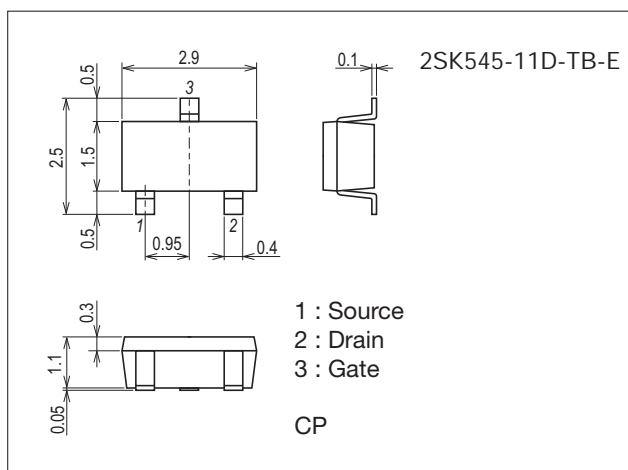
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSS</sub>		40	V
Gate-to-Drain Voltage	V <sub>GDS</sub>		-40	V
Gate Current	I <sub>G</sub>		10	mA
Drain Current	I <sub>D</sub>		1	mA
Allowable Power Dissipation	P <sub>D</sub>		100	mW
Junction Temperature	T <sub>j</sub>		125	°C
Storage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

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

### Package Dimensions

unit : mm (typ)

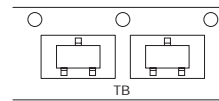
7013A-011



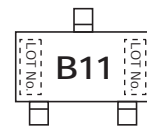
### Product & Package Information

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

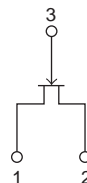
### Packing Type: TB



### Marking



### Electrical Connection



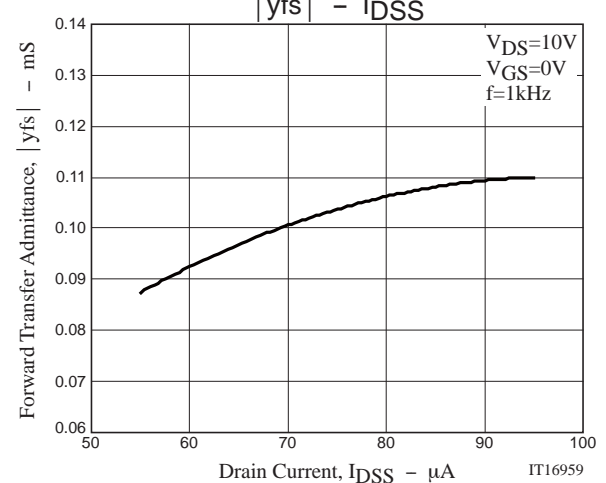
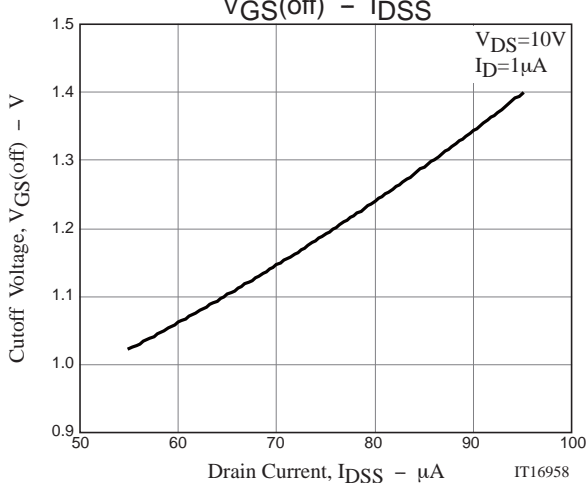
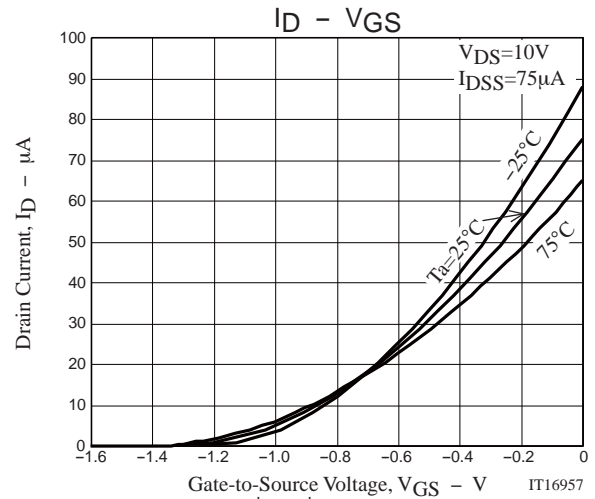
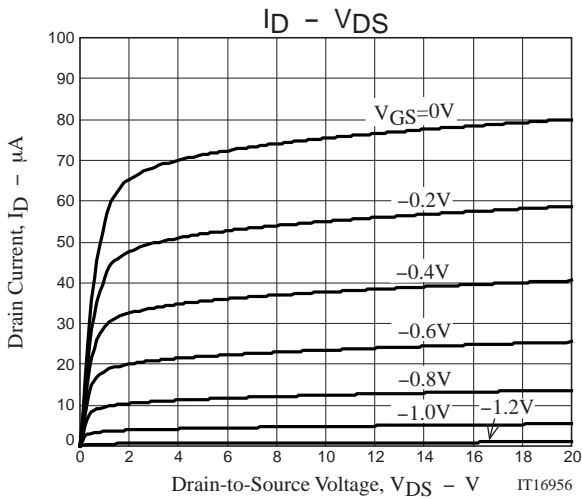
# 2SK545

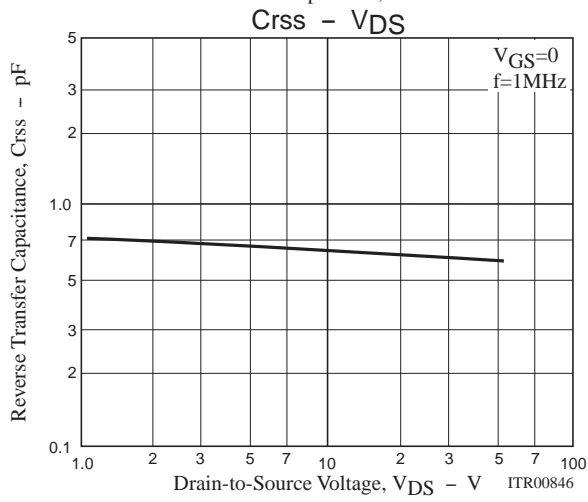
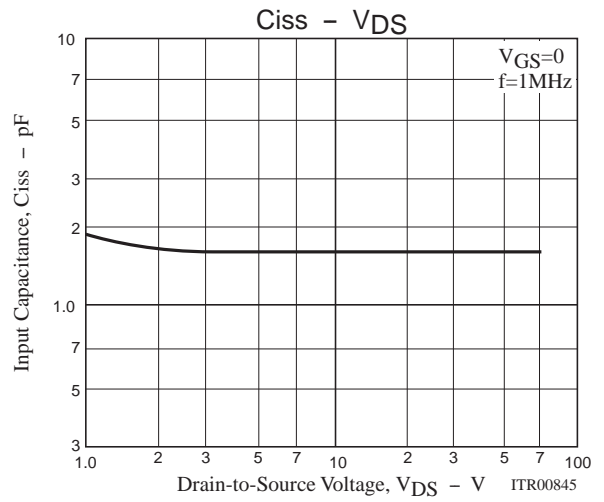
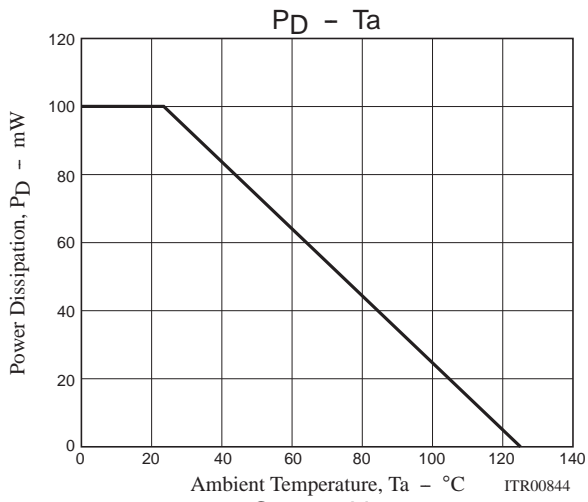
## Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V(BR)GDS	ID=-10μA, VDS=0V	-40			V
Gate Cutoff Current	IGSS	VGS=-20V, VDS=0V			-500	pA
Drain Current	IDSS	VDS=10V, VGS=0V	55		95	μA
Cutoff Voltage	VGS(off)	VDS=10V, ID=1μA		-1.2	-4.0	V
Forward Transfer Admittance	yfs	VDS=10V, VGS=0V, f=1kHz	0.05	0.10		mS
Input Capacitance	Ciss	VDS=10V, VGS=0V, f=1MHz		1.7		pF
Reverse Transfer Capacitance	Crss			0.7		pF

## Ordering Information

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





Embossed Taping Specification

2SK545-11D-TB-E

1. Packing Format

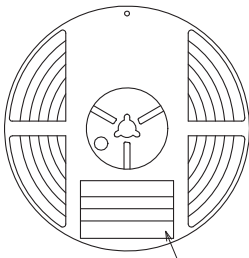
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CP	CP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Reel label, Inner box label  
(unit:mm)

Outer box label

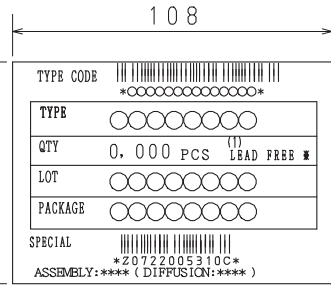
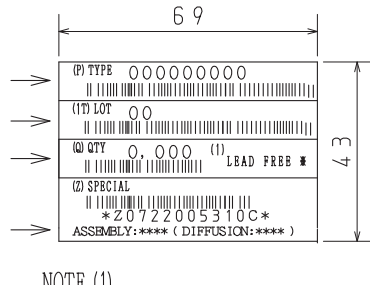
It is a label at the time of factory shipments.  
The form of a label may change in physical distribution process.

Packing method



Reel label

Type No.  
LOT No.  
Quantity  
Origin



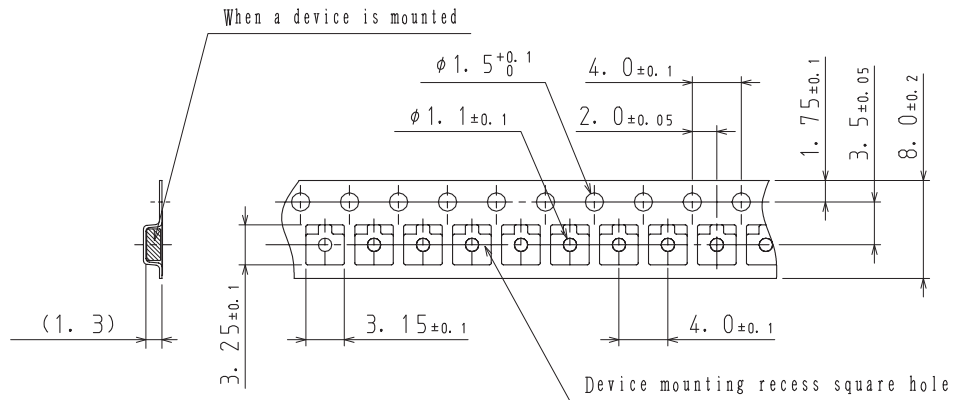
NOTE (1)

The LEAD FREE \* description shows that the surface treatment of the terminal is lead free.

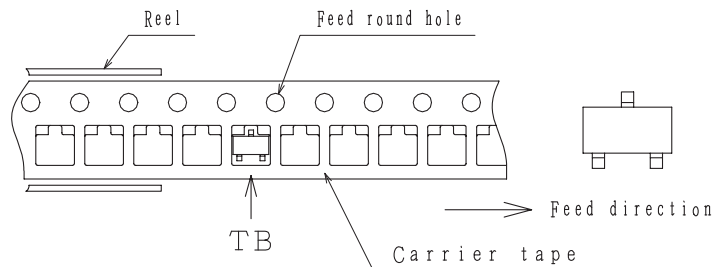
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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

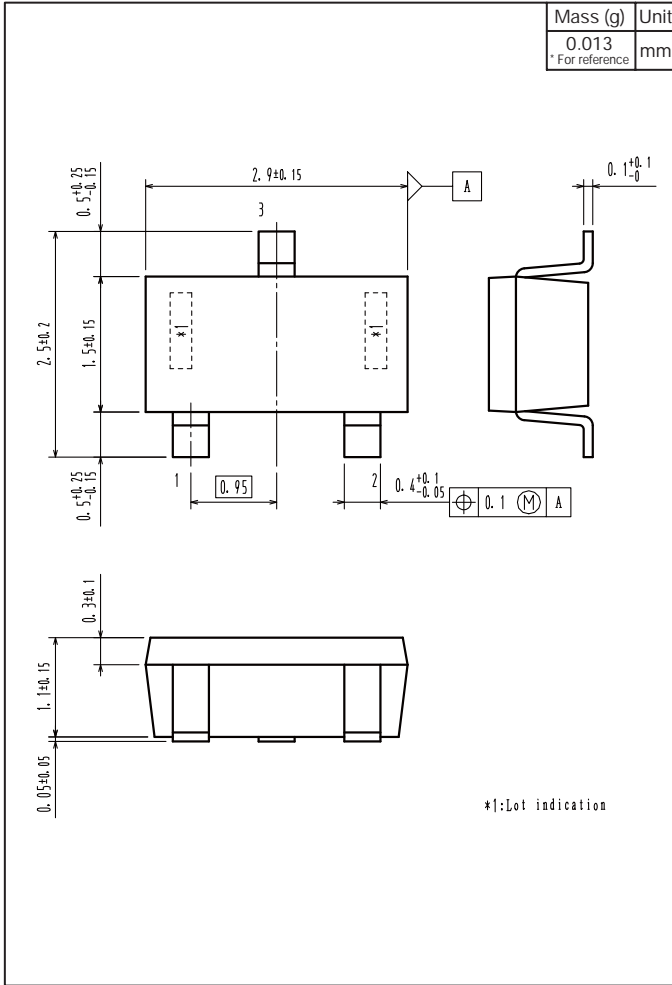


2-2. Device placement direction

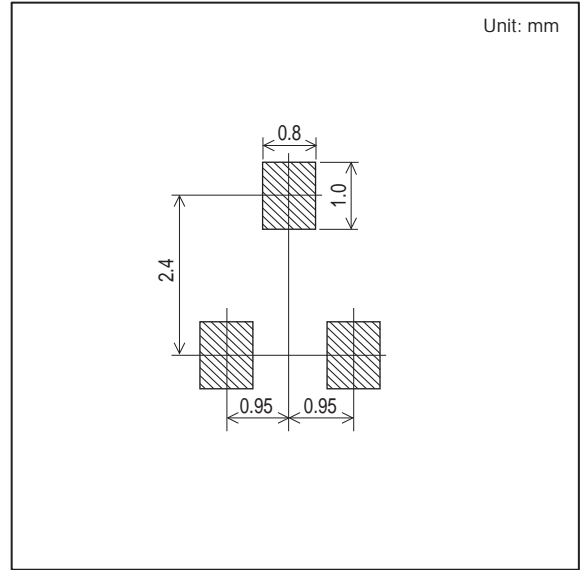


Those with one electrode terminal on the feed hole side.....TB

Outline Drawing  
2SK545-11D-TB-E



Land Pattern Example



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