



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

2SK3738 — N-Channel Junction Silicon FET Impedance Converter Applications

Applications

- Impedance conversion
- Infrared sensor

Features

- Small IGSS
- Small Ciss
- Ultrasmall package permitting applied sets to be small and slim

Specifications

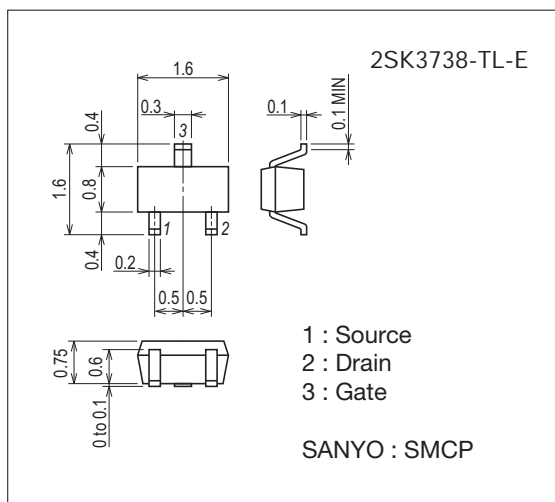
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSS}		40	V
Gate-to-Drain Voltage	V _{GDS}		-40	V
Gate Current	I _G		10	mA
Drain Current	I _D		1	mA
Allowable Power Dissipation	P _D		100	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Package Dimensions

unit : mm (typ)

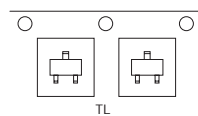
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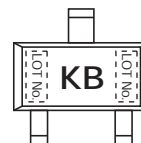
Product & Package Information

- Package : SMCP
- JEITA, JEDEC : SC-75, SOT-416
- Minimum Packing Quantity : 3,000 pcs./reel

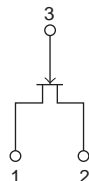
Packing Type: TL



Marking



Electrical Connection



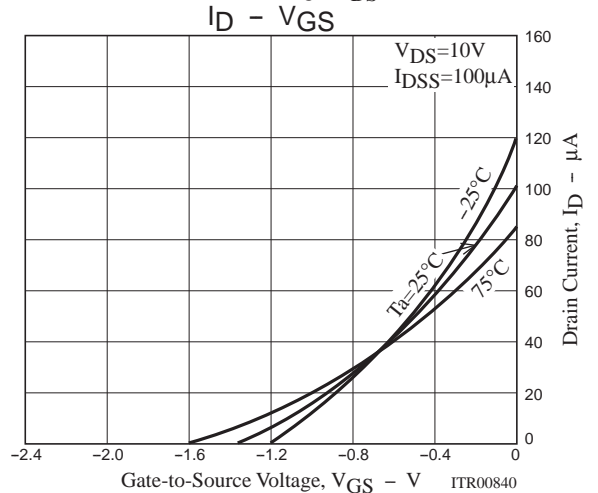
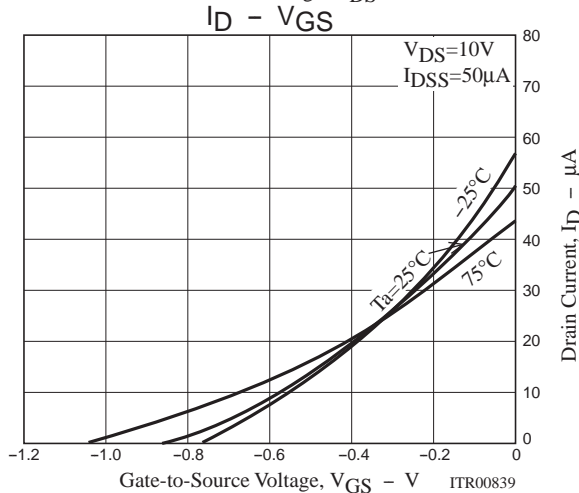
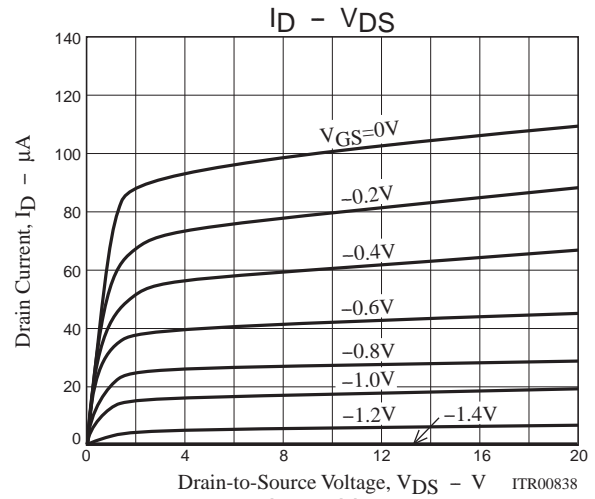
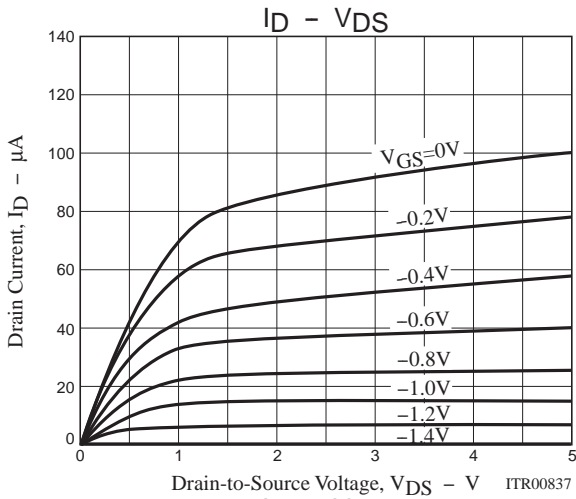
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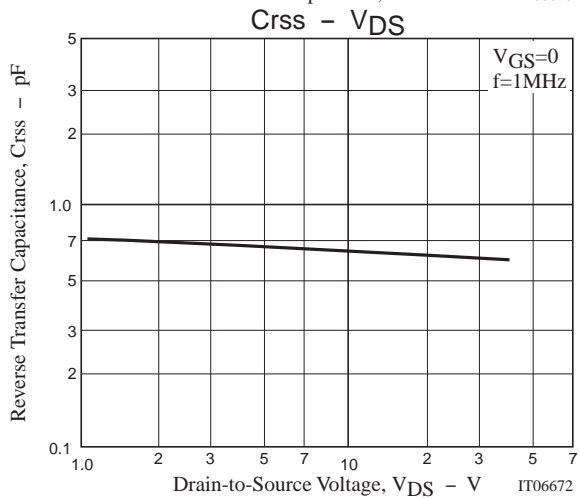
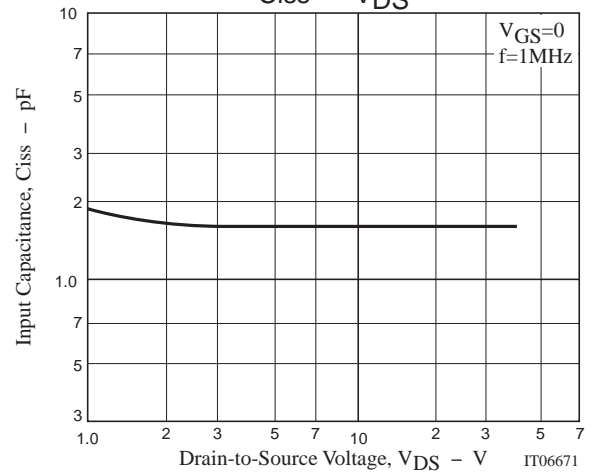
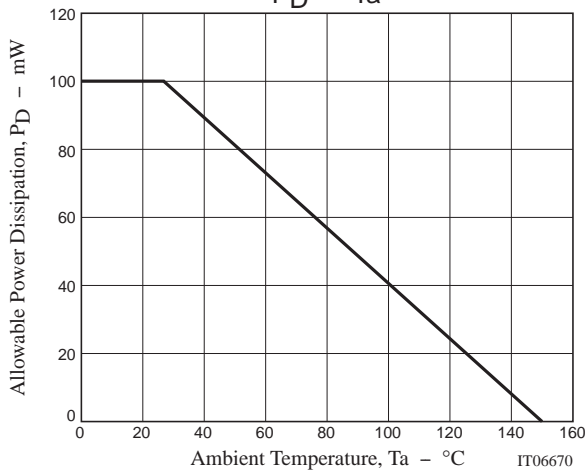
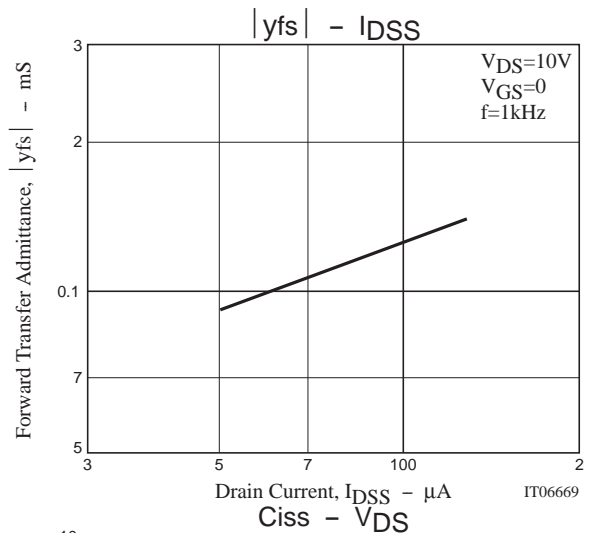
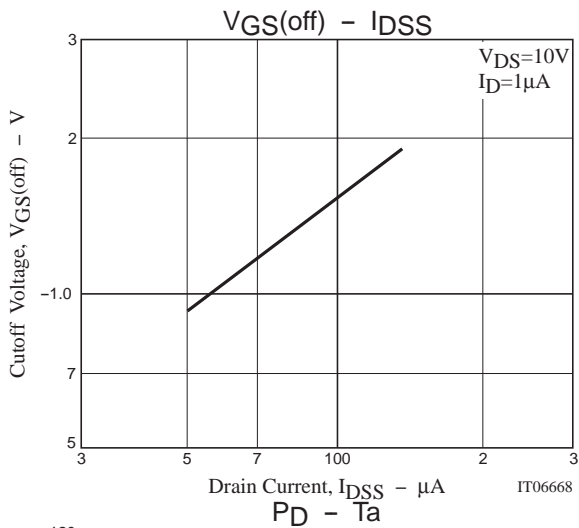
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V(BR)GDS	I _G =-10μA, V _{DS} =0V	-40			V
Gate Cutoff Current	I _{GSS}	V _{GS} =-20V, V _{DS} =0V			-500	pA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1μA		-1.5	-2.3	V
Drain Current	I _{DSS}	V _{DS} =10V, V _{GS} =0V		50	130	μA
Forward Transfer Admittance	y _{fs}	V _{DS} =10V, V _{GS} =0V, f=1kHz	0.06	0.13		mS
Input Capacitance	C _{iss}	V _{DS} =10V, V _{GS} =0V, f=1MHz		1.7		pF
Reverse Transfer Capacitance	C _{rss}			0.7		pF

Ordering Information

Device	Package	Shipping	memo
2SK3738-TL-E	SMCP	3,000pcs./reel	Pb Free





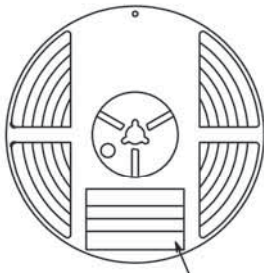
Embossed Taping Specification

2SK3738-TL-E

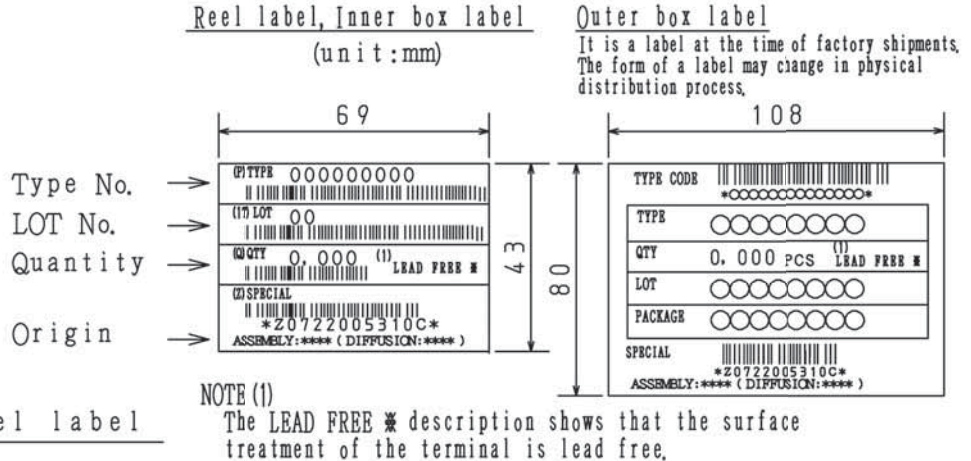
1. Packing Format

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)
SMCP	SMCP	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



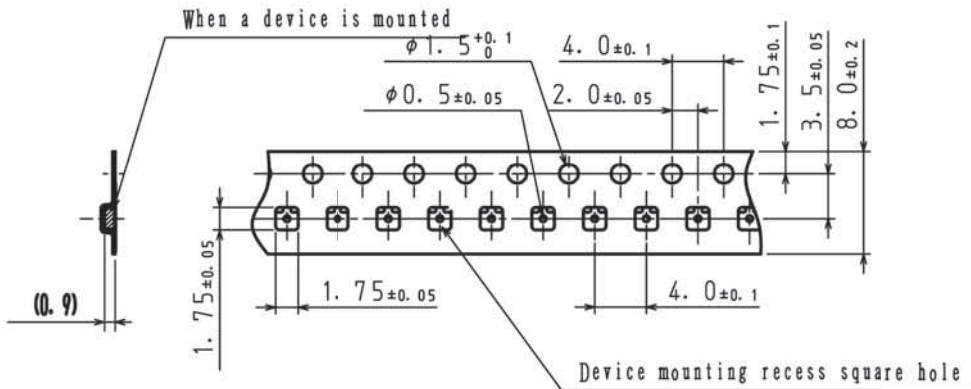
Reel label



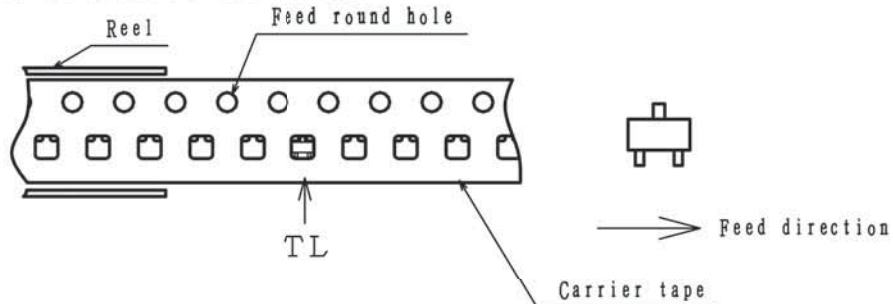
Label	JEITA Phase
.....	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

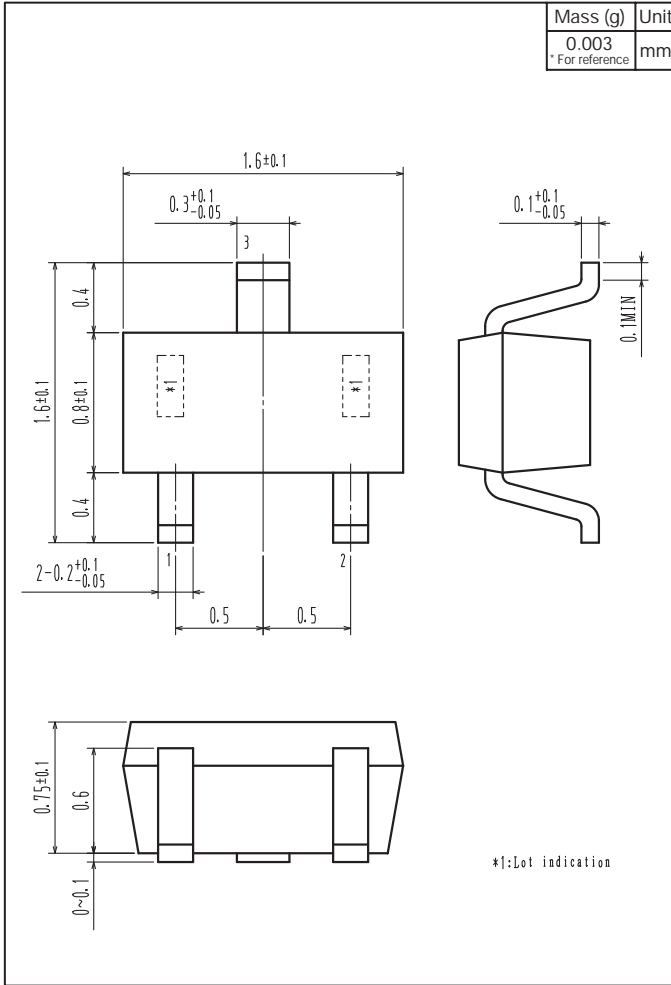


Those with one electrode terminal on the feed hole side.....TL

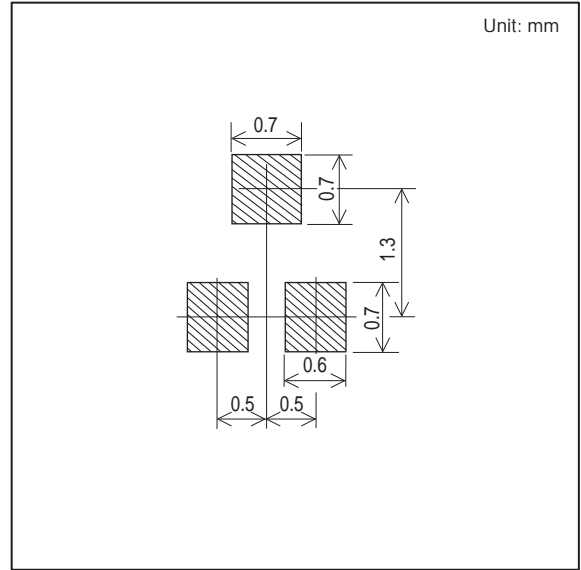
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Outline Drawing

2SK3738-TL-E



Land Pattern Example



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