



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

N-Channel Silicon Junction FET

TF410 — Impedance Converter, Infrared Sensor Applications

Applications

- Impedance conversion, infrared sensor applications

Features

- Ultrasmall package facilities miniaturization in end products : 1.0mm×0.6mm×0.27mm (max 0.3mm)
- Small IGSS : max -500pA (VGSS= -20V, VDS=0V)
- Small Ciss : typ. 0.7pF (VDS= 10V, VGS=0V, f=1MHz)
- Halogen free compliance

Specifications

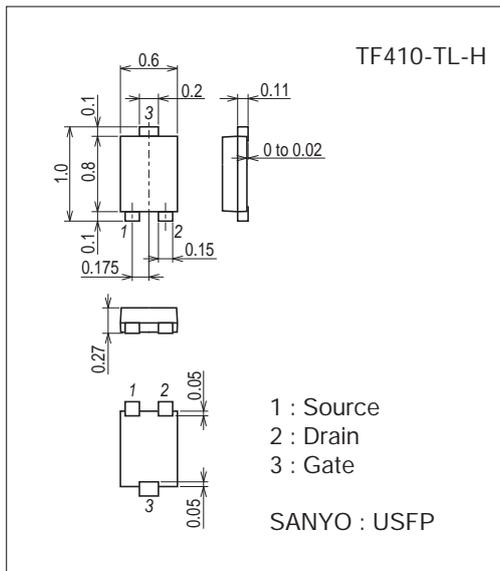
Absolute Maximum Ratings at Ta=25°C

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		30	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Package Dimensions

unit : mm (typ)

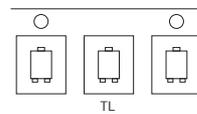
7055-003



Product & Package Information

- Package : USFP
- JEITA, JEDEC : -
- Minimum Packing Quantity : 10,000 pcs./reel

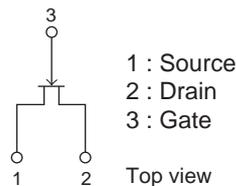
Packing Type: TL



Marking



Electrical Connection



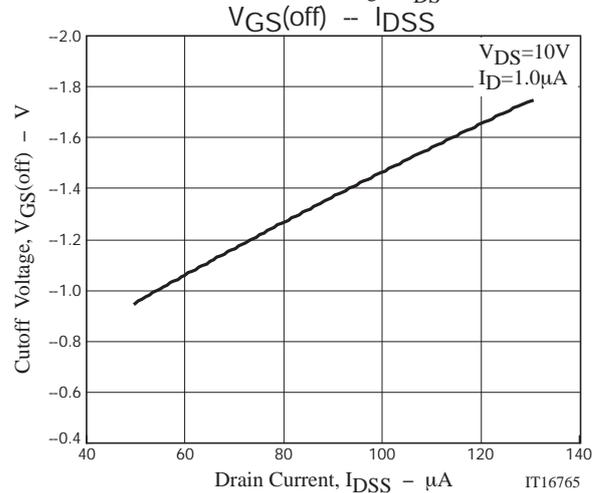
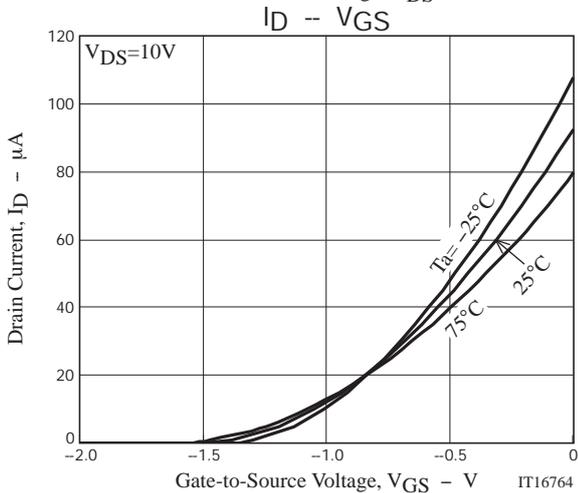
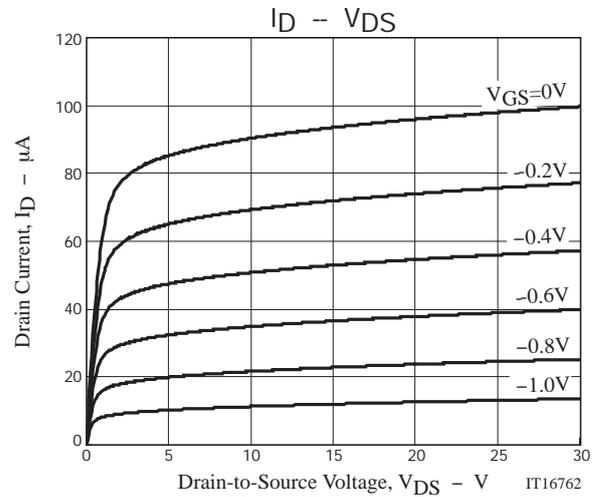
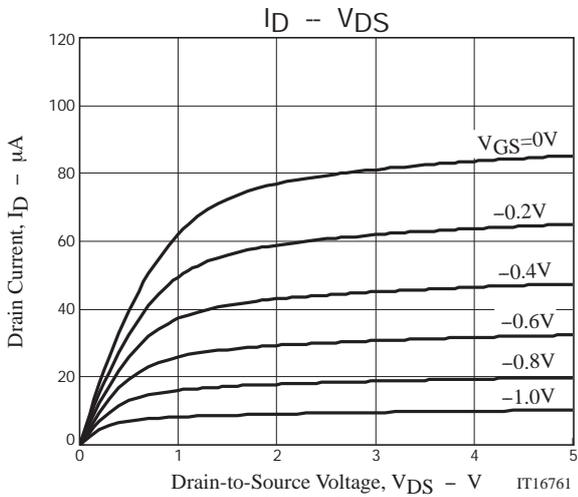
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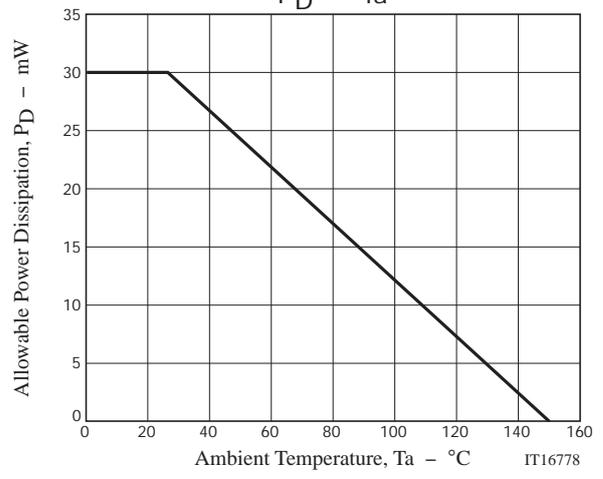
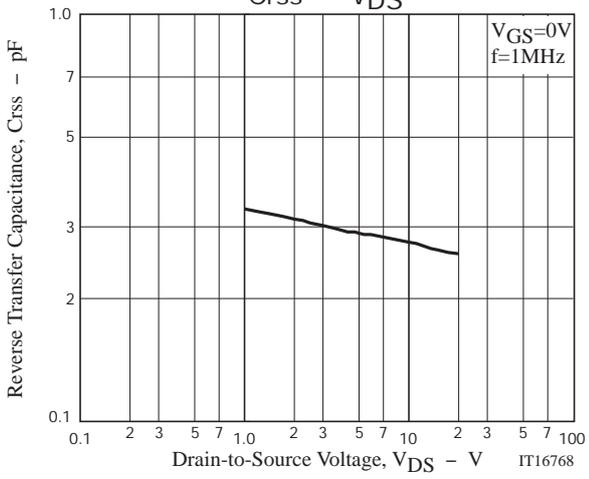
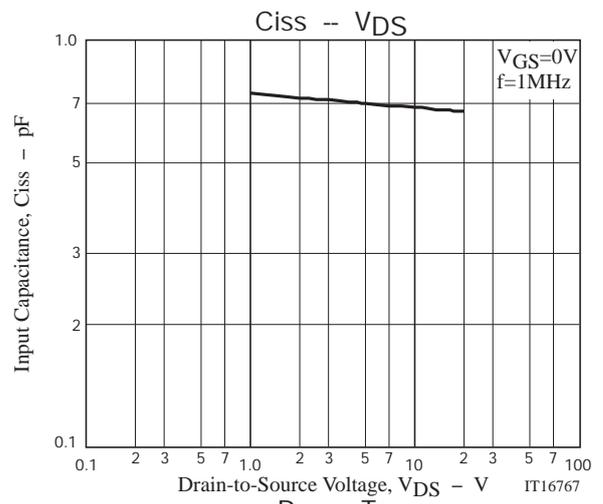
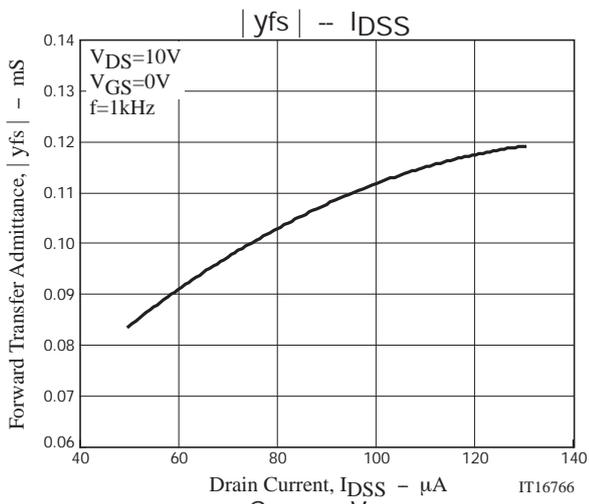
Electrical Characteristics at Ta=25°C

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-to-Source Leakage Current	I _{GSS}	V _{GS} =-20V, V _{DS} =0V			-500	pA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =1μA		-1.4	-4.0	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	0.05	0.11		mS
Input Capacitance	C _{iss}	V _{DS} =10V, V _{GS} =0V, f=1MHz		0.7		pF
Reverse Transfer Capacitance	C _{rss}			0.3		pF

Ordering Information

Device	Package	Shipping	memo
TF410-TL-H	USFP	10,000pcs./reel	Pb Free and Halogen Free





Taping Specification

TF410-TL-H

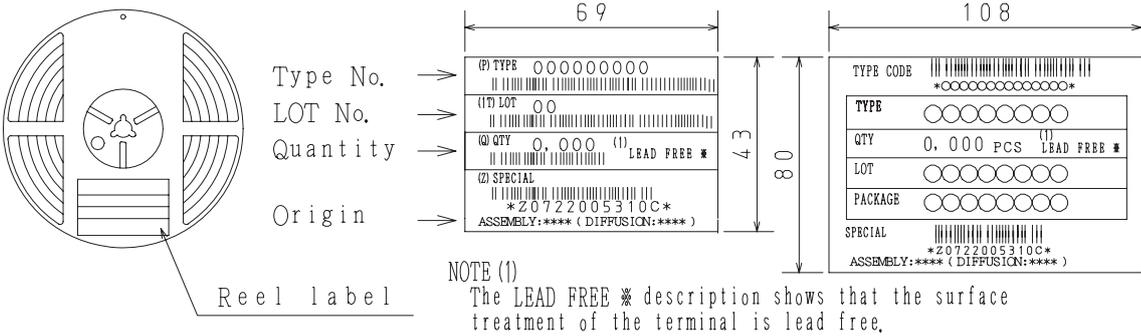
1. Packing Format

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)
USFP	USFP	10,000	50,000	300,000	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.

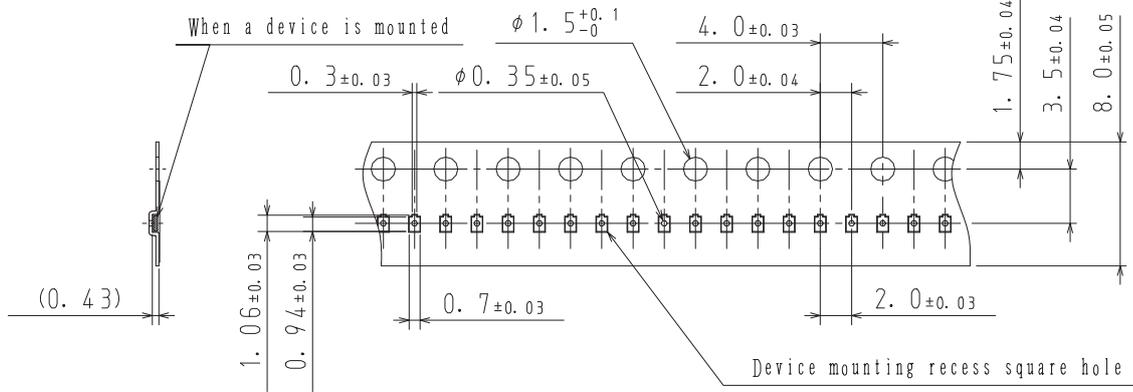


NOTE (1)
The LEAD FREE * description shows that the surface treatment of the terminal is lead free.

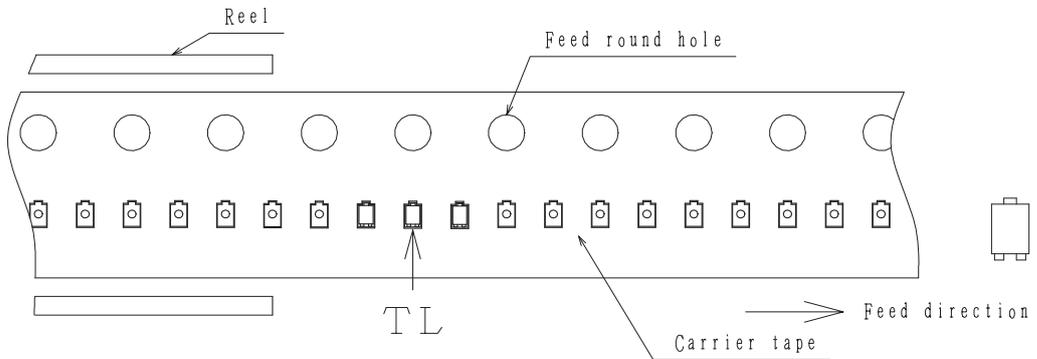
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

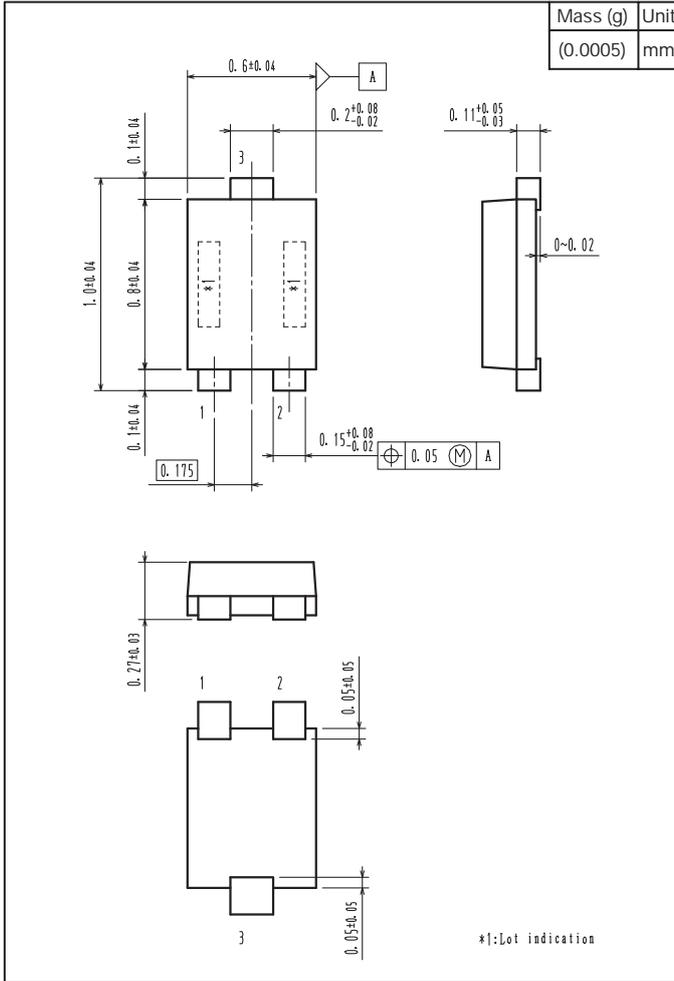


Those with one electrode terminal on the feed hole side.....TL

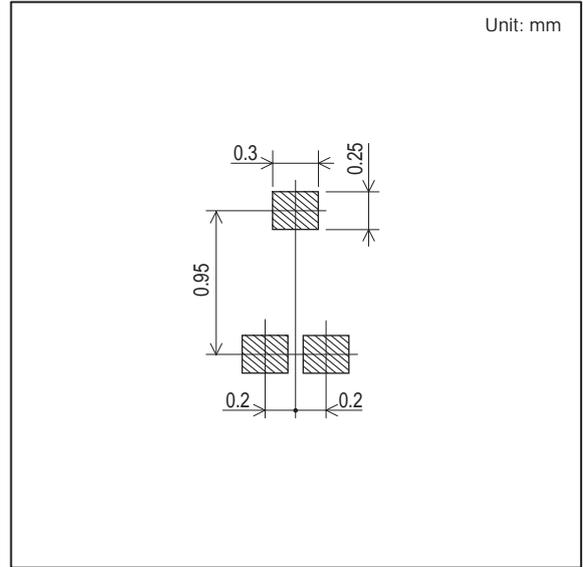
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Outline Drawing

TF410-TL-H



Land Pattern Example



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