



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

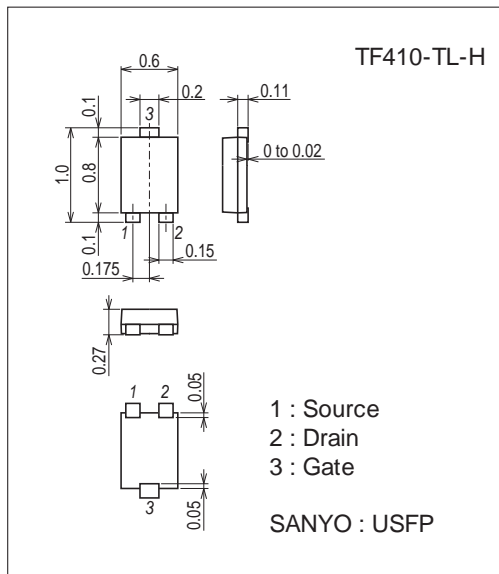
Absolute Maximum Ratings at Ta=25°C

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)

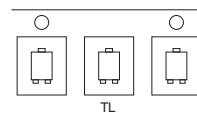
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Product & Package Information

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

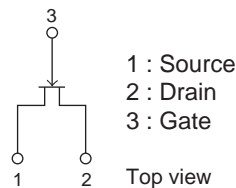
Packing Type: TL



Marking



Electrical Connection



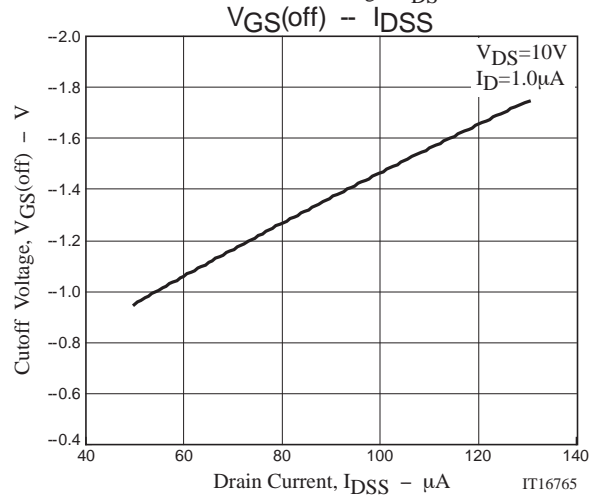
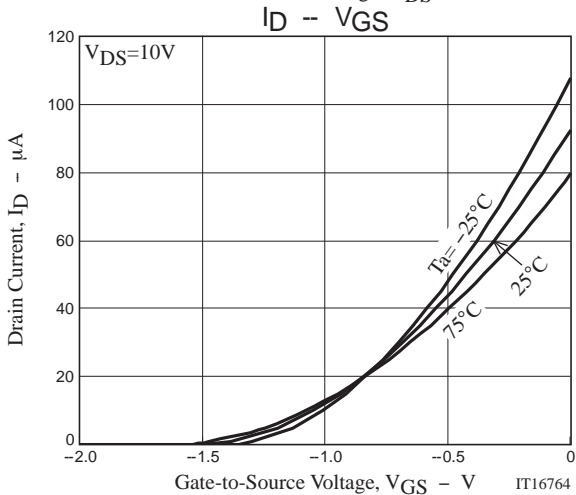
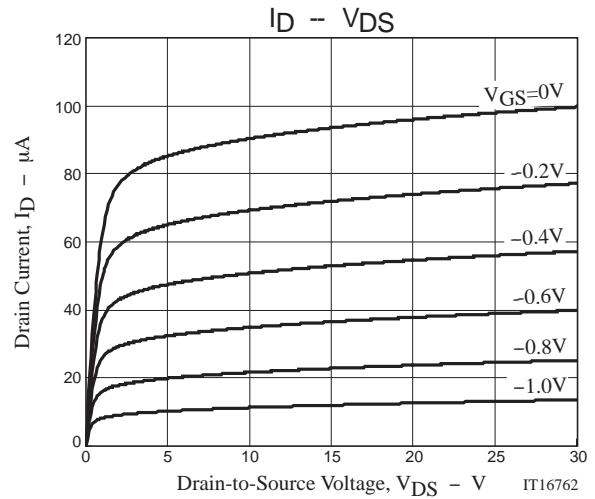
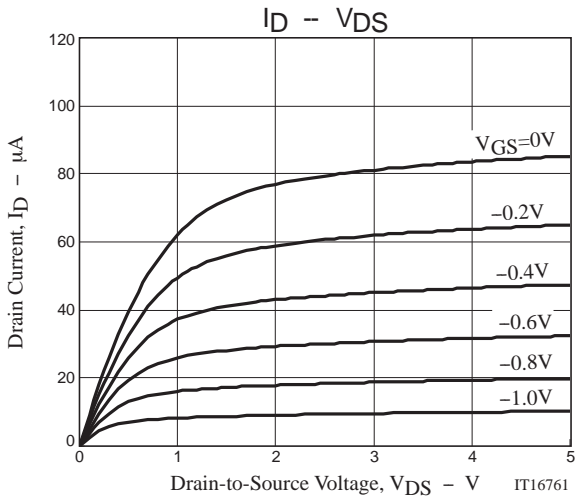
TF410

Electrical Characteristics at Ta=25°C

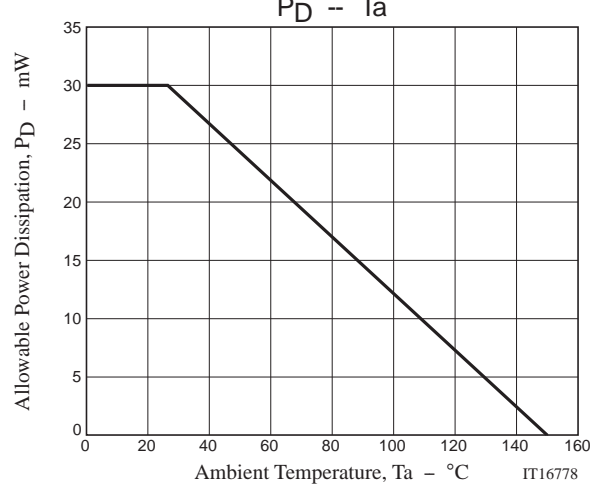
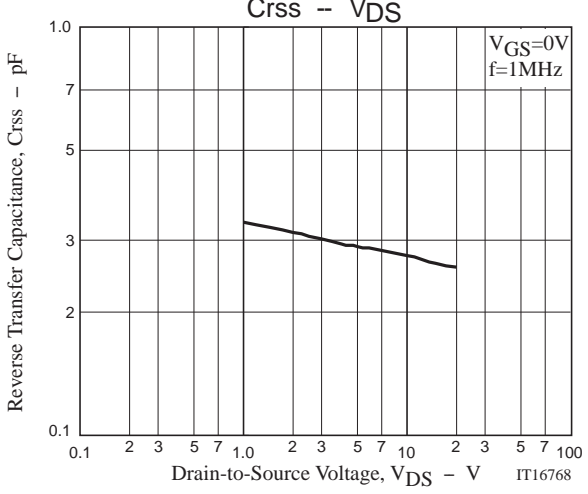
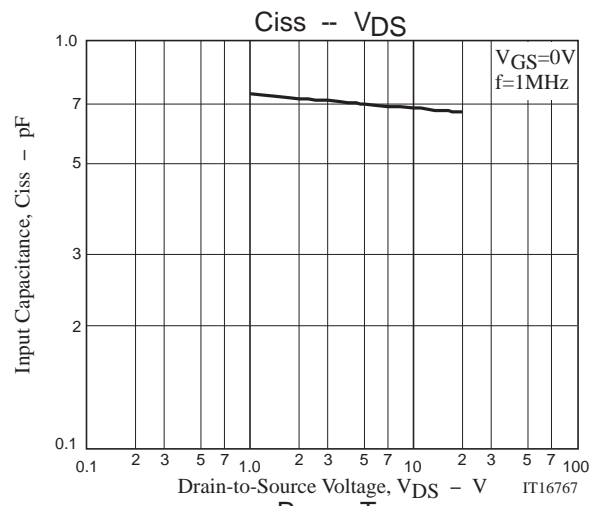
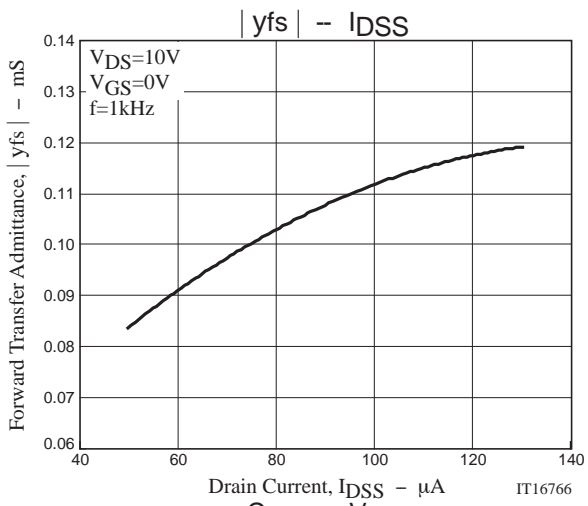
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V(BR)GDS	IG=-10μA, VDS=0V	-40			V
Gate-to-Source Leakage Current	IGSS	VGS=-20V, VDS=0V			-500	pA
Cutoff Voltage	VGS(off)	VDS=10V, ID=1μA		-1.4	-4.0	V
Drain Current	IDSS	VDS=10V, VGS=0V	50		130	μA
Forward Transfer Admittance	yfs	VDS=10V, VGS=0V, f=1kHz	0.05	0.11		mS
Input Capacitance	Ciss	VDS=10V, VGS=0V, f=1MHz		0.7		pF
Reverse Transfer Capacitance	Crss			0.3		pF

Ordering Information

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



TF410



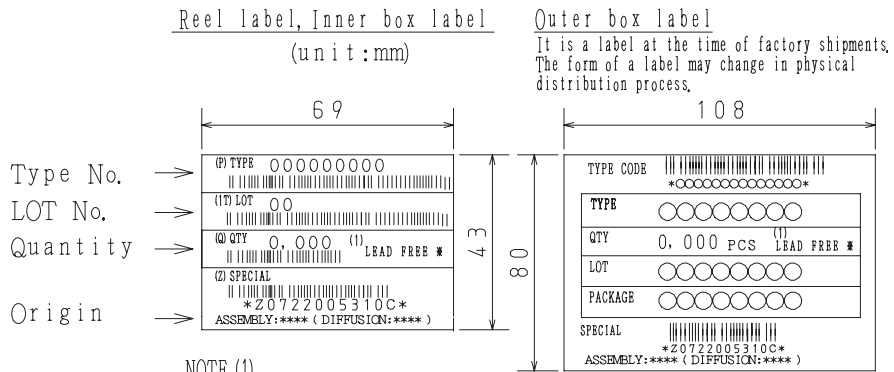
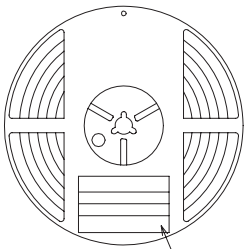
Taping Specification

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

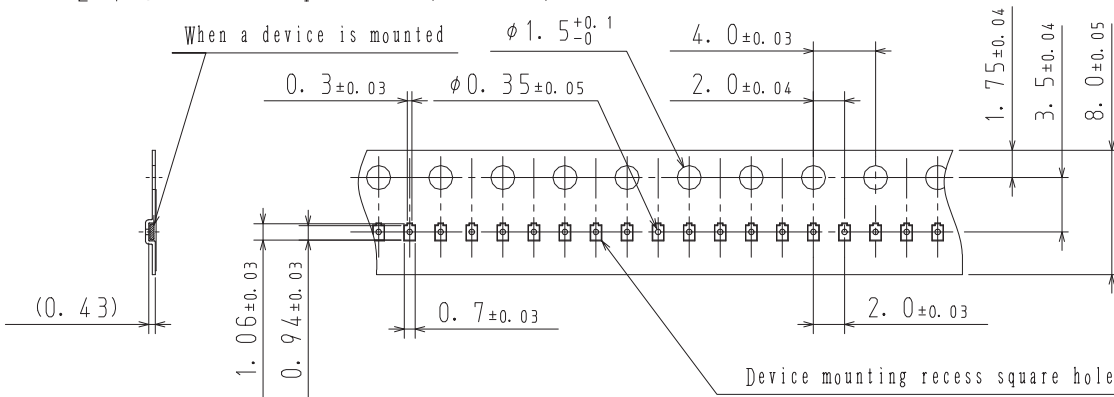


NOTE (1)
The LEAD FREE * description shows that the surface treatment of the terminal is lead free.

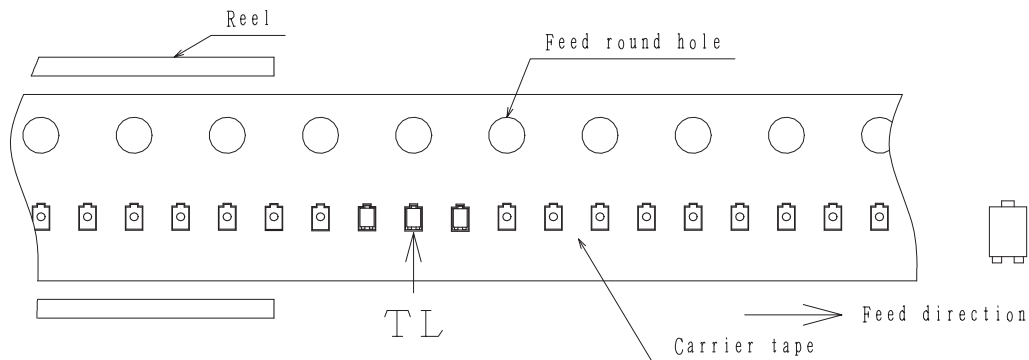
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

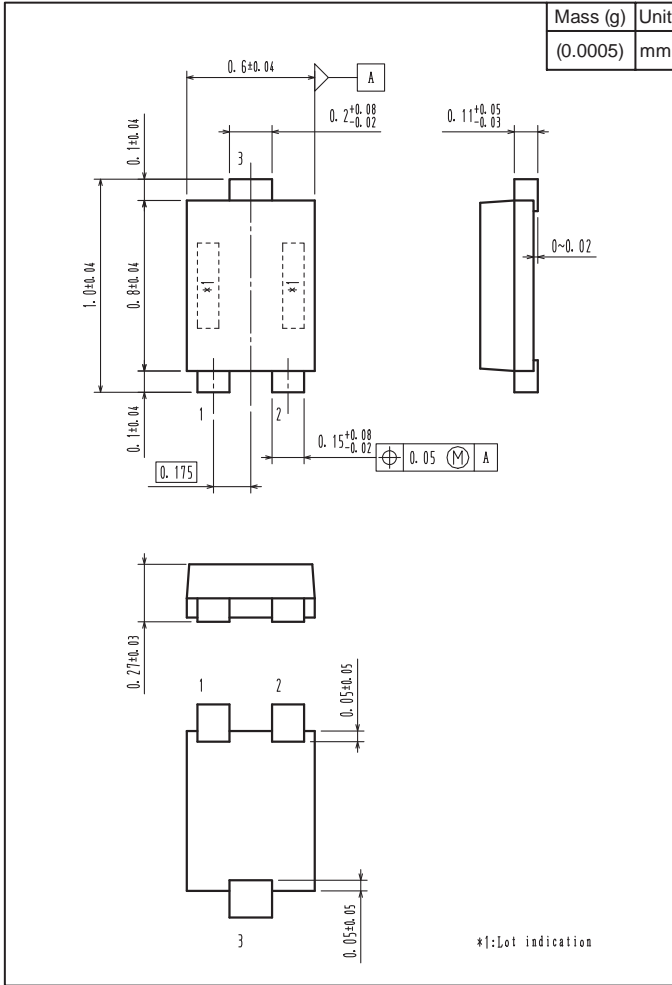


Those with one electrode terminal on the feed hole side.....TL

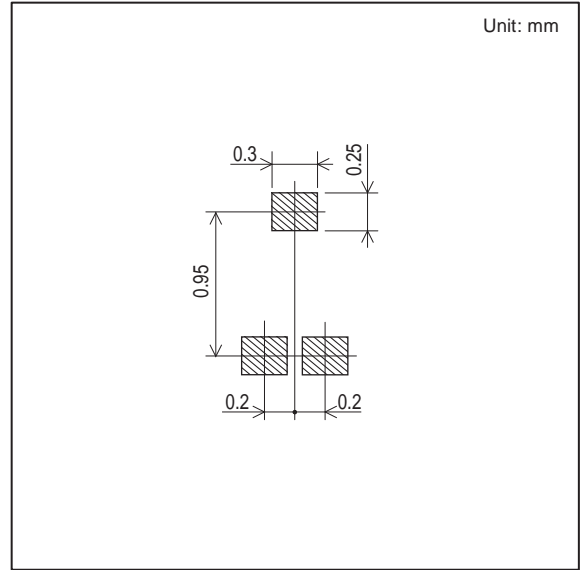
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Outline Drawing

TF410-TL-H



Land Pattern Example



Unit: mm

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