

SANYO Semiconductors DATA SHEET

An ON Semiconductor Company

N-Channel Silicon Junction FET

TF408 — Low-Frequency General-Purpose Amplifier, Impedance Converter Applications

Applications

· Low-Frequency general-purpose amplifier, impedance conversion, infrared sensor applications

Features

- · Ultrasmall package facilitates miniaturization in end products: 1.0mm×0.6mm×0.27mm (max 0.3mm)
- Small IGSS: max -1.0nA (VGS = -20V, VDS = 0V)
- Small Ciss: typ 4pF (VDS= 10V, VGS=0V, f=1MHz)
- · Halogen free compliance

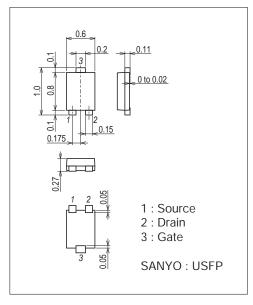
Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	VDSX		30	V
Gate-to-Drain Voltage	VGDS		-30	V
Gate Current	IG		10	mA
Drain Current	ID		10	mA
Allowable Power Dissipation	PD		30	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Package Dimensions

unit : mm (typ) 7055-003

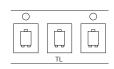


Product & Package Information

Package : USFPJEITA, JEDEC : -

• Minimum Packing Quantity : 10,000 pcs./reel

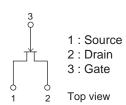
Packing Type: TL



Marking



Electrical Connection

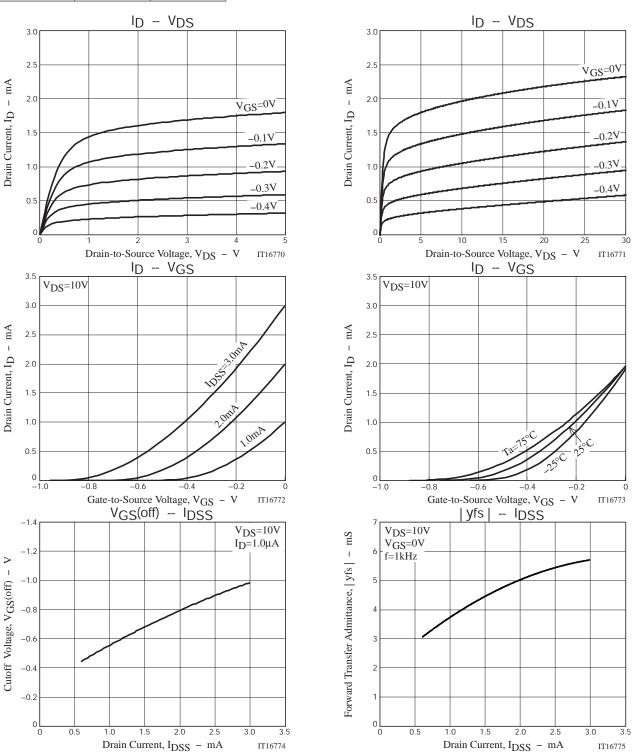


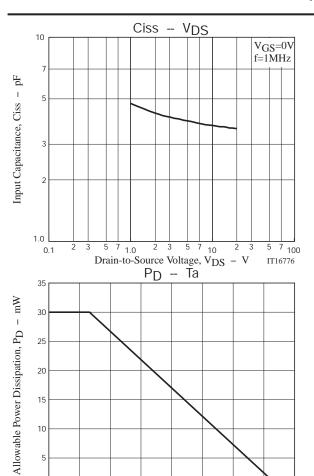
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Ullit
Gate-to-Drain Breakdown Voltage	V(BR)GDS	IG=-10μA, VDS=0V	-30			V
Gate-to-Source Leakage Current	IGSS	V _{GS} =-20V, V _{DS} =0V			-1.0	nA
Cutoff Voltage	V _{GS} (off)	V _{DS} =10V, I _D =1μA	-0.18	-0.60	-1.5	V
Drain Current	IDSS	V _{DS} =10V, V _{GS} =0V	0.6*		3.0*	mA
Forward Transfer Admittance	yfs	V _{DS} =10V, V _{GS} =0V, f=1kHz	3.0	5.0		mS
Input Capacitance	Ciss	V _{DS} =10V, V _{GS} =0V, f=1MHz		4		pF
Reverse Transfer Capacitance	Crss			1.1		pF

*: The TF408 is classified by IDSS as follows: (unit: mA)

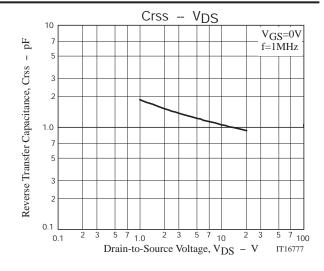
Rank	2	3
IDSS	0.6 to 1.5	1.2 to 3.0





Ambient Temperature, Ta - $^{\circ}C$

IT16778



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