



ON Semiconductor®

ON Semiconductor DATA SHEET

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

Application

- 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

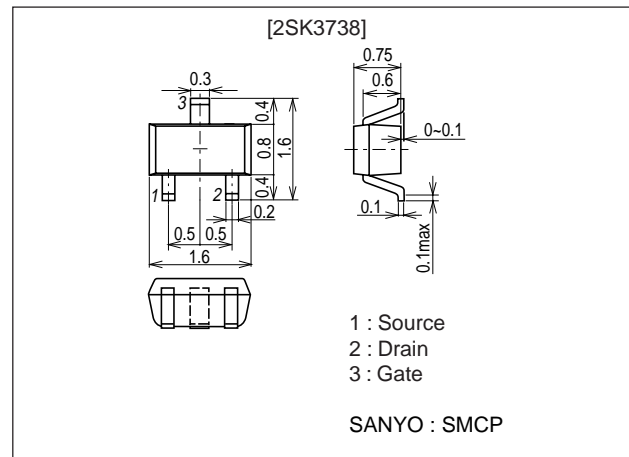
Electrical Characteristics at Ta=25°C

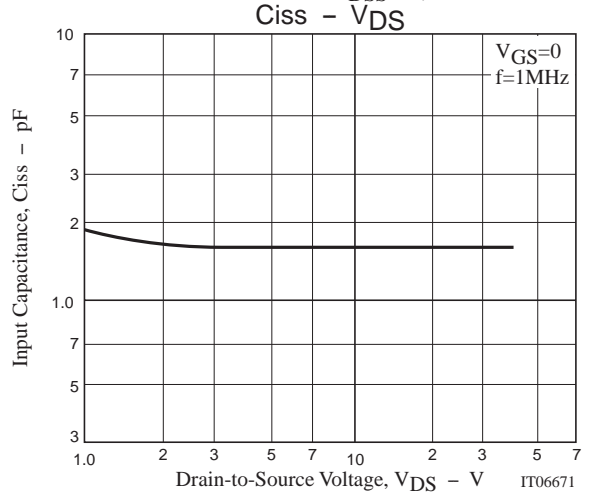
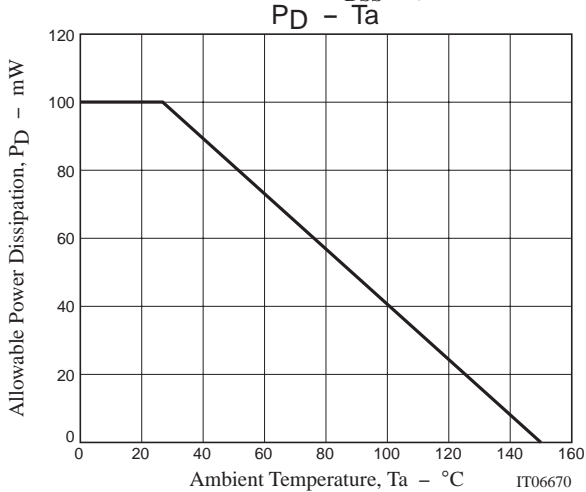
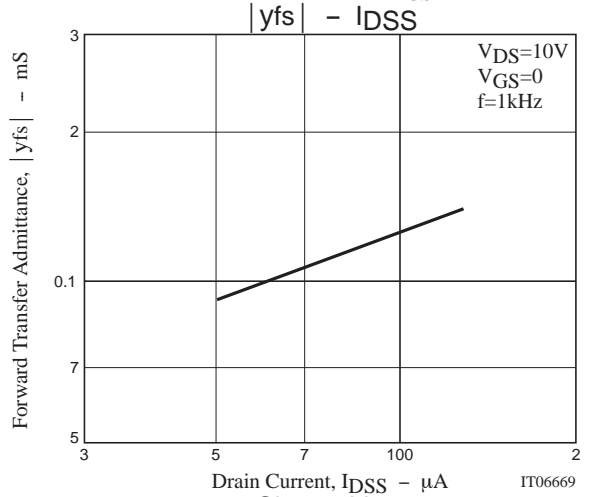
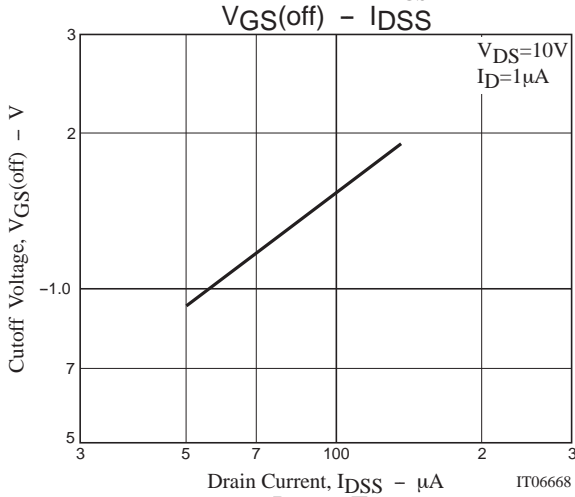
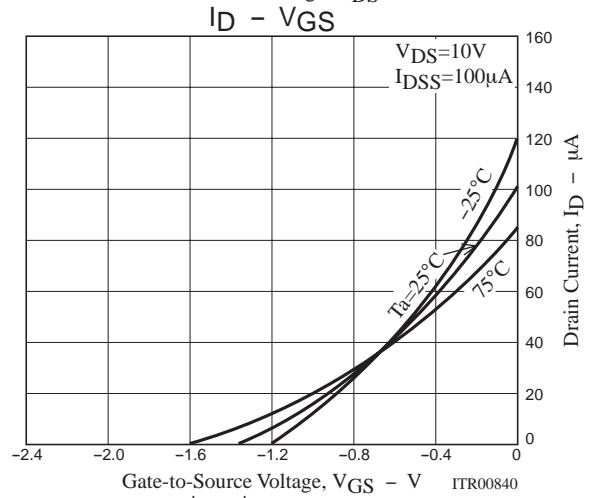
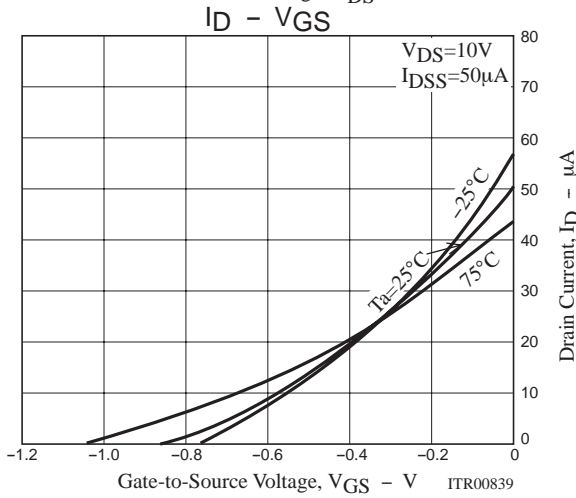
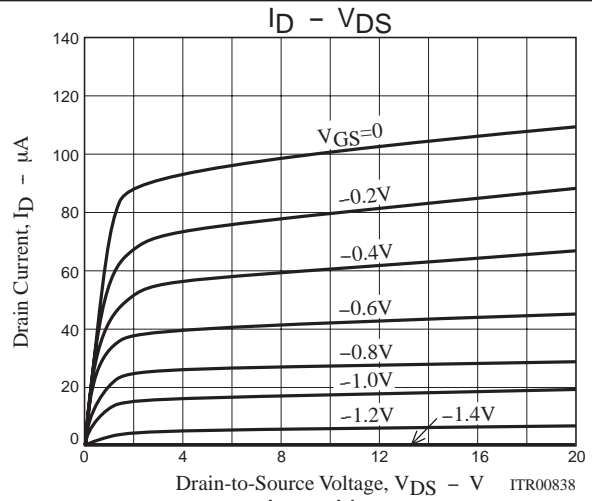
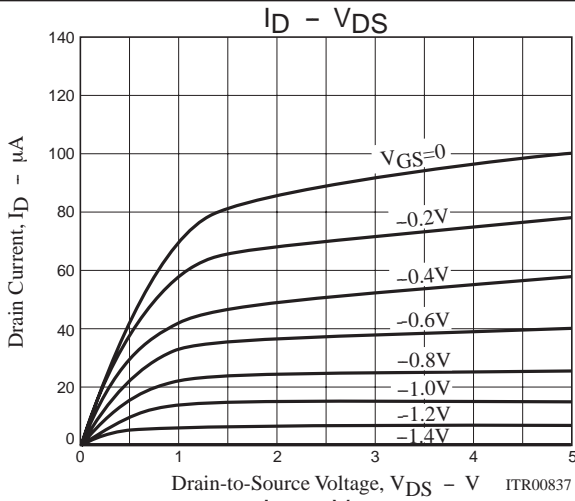
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V _{(BR)GDS}	I _G =-10μA, V _D S=0	-40			V
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =-20V, V _D S=0			-500	pA
Cutoff Voltage	V _{GS(off)}	V _D S=10V, I _D =1μA		-1.5	-2.3	V
Zero-Gate Voltage Drain Current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

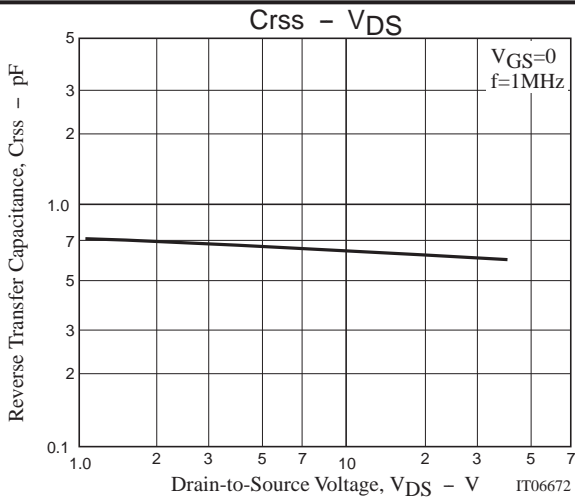
Marking : KB

Package Dimensions

unit : mm
2124







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