

2SK3738



Impedance Converter Applications

Application

- Impedance conversion.
- Infrared sensor.

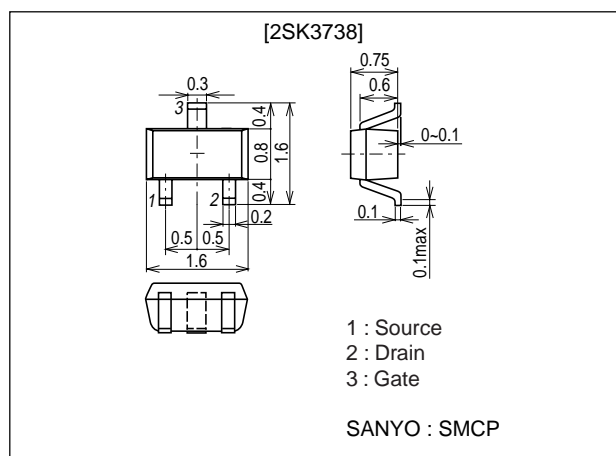
Package Dimensions

unit : mm

2124

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 $T_a=25^\circ\text{C}$

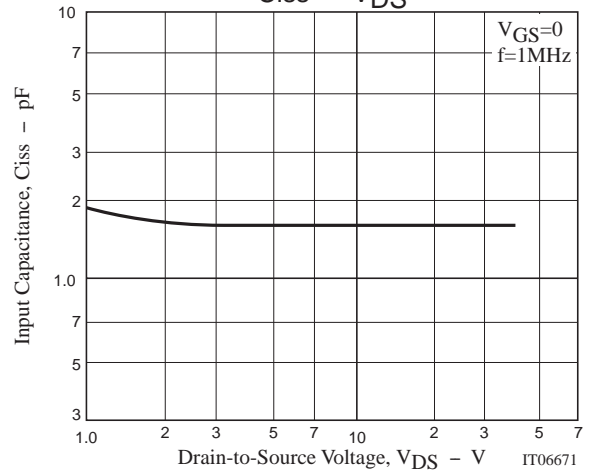
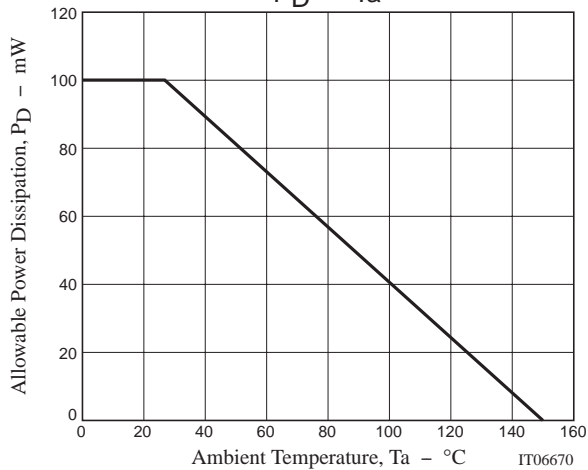
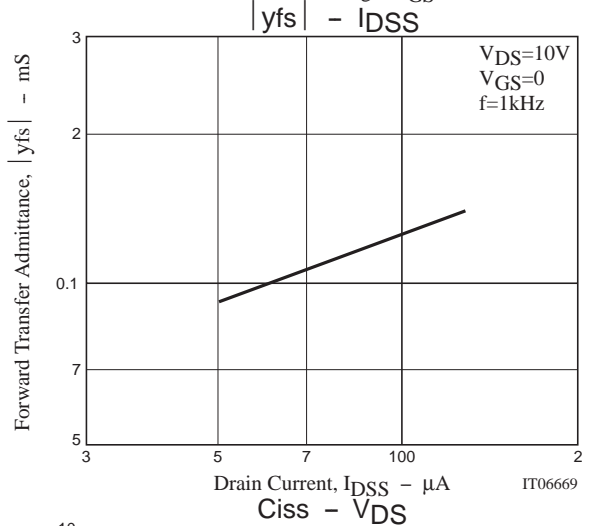
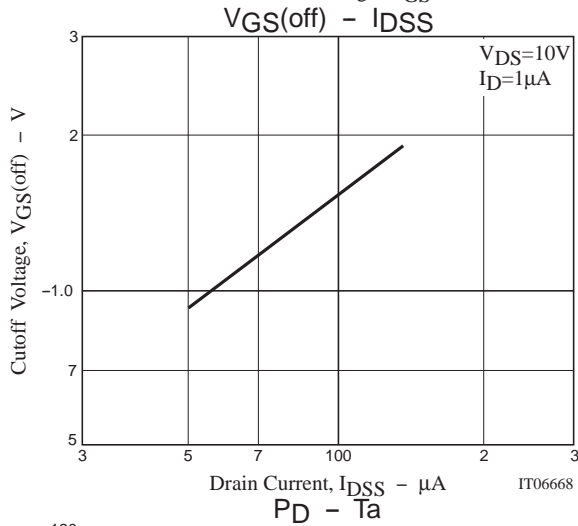
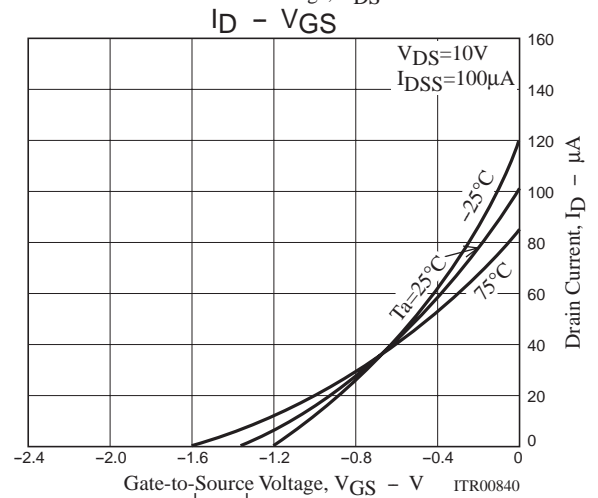
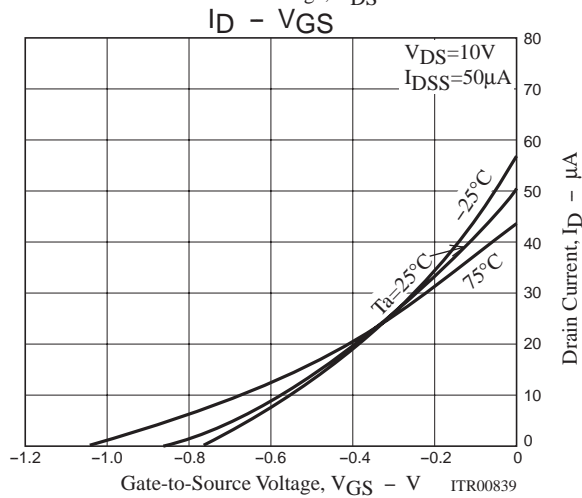
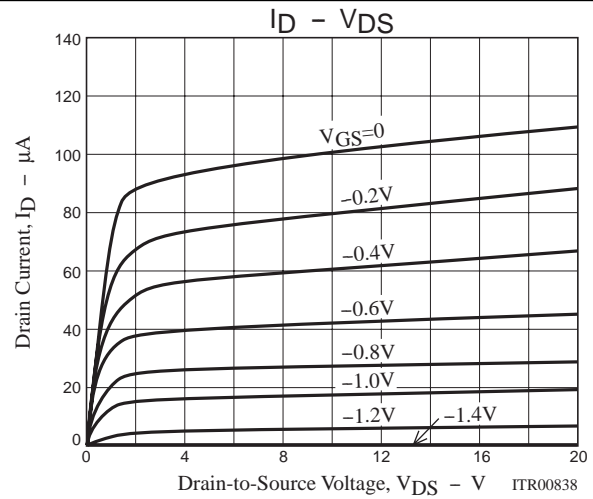
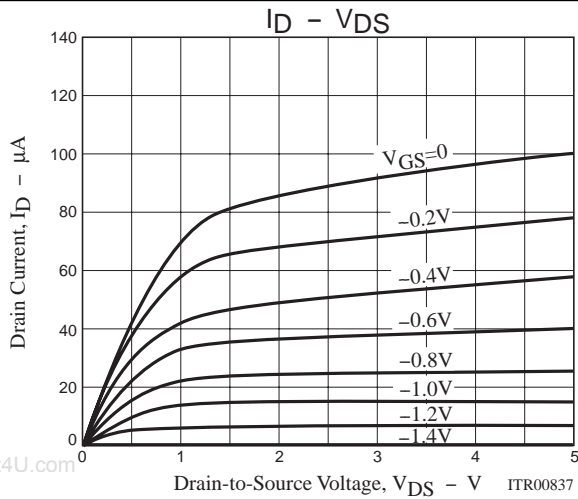
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0$	-40			V
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = -20V, V_{DS} = 0$			-500	pA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1\mu A$		-1.5	-2.3	V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 10V, V_{GS} = 0$	50		130	μA
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	0.06	0.13		mS
Input Capacitance	C_{iss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		1.7		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		0.7		pF

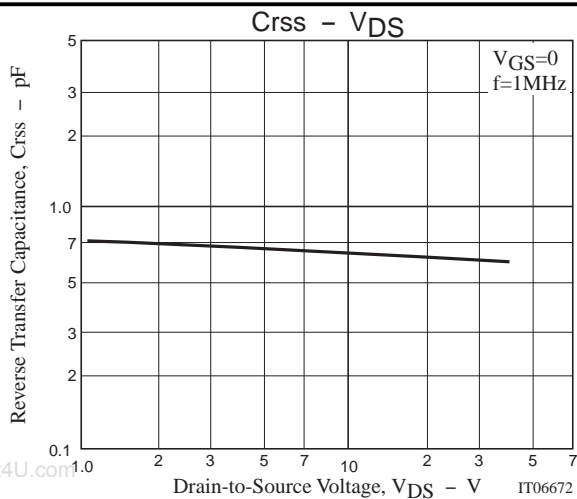
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