

TOSHIBA FIELD EFFECT TRANSISTOR SILICON P CHANNEL MOS TYPE

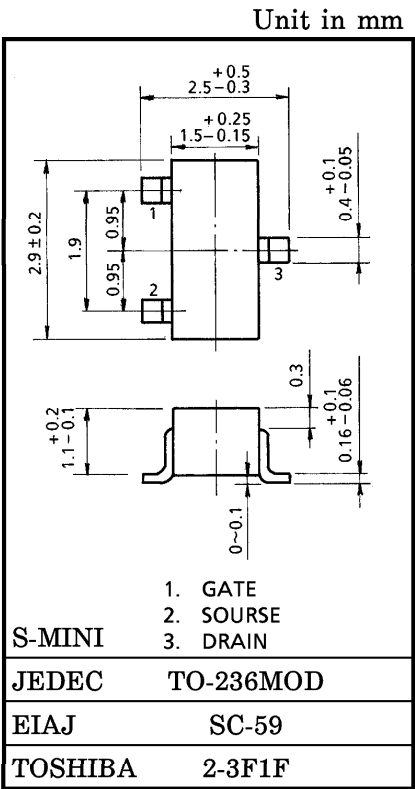
2SJ305

HIGH SPEED SWITCHING APPLICATIONS
ANALOG APPLICATIONS

- High Input Impedance
- Low Gate Threshold Voltage. : $V_{th} = -0.5 \sim -1.5V$
- Excellent Switching Times. : $t_{on} = 0.06\mu s$ (Typ.)
 $t_{off} = 0.15\mu s$ (Typ.)
- Low Drain-Source ON Resistance. : $R_{DS(ON)} = 2.4\Omega$ (Typ.)
- Small Package.
- Complementary to 2SK2009.

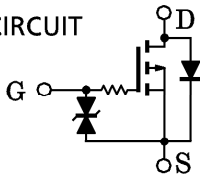
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GSS}	± 20	V
DC Drain Current	I_D	-200	mA
Drain Power Dissipation	P_D	200	mW
Channel Temperature	T_{ch}	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

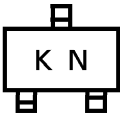


Weight : 0.012g

EQUIVALENT CIRCUIT



MARKING



THIS TRANSISTOR IS ELECTROSTATIC SENSITIVE DEVICE.
PLEASE HANDLE WITH CAUTION.

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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current		IGSS	VGS = ±10V, VDS = 0	—	—	±0.1	μA
Drain-Source Breakdown Voltage		V(BR)DSS	ID = -1mA, VGS = 0	-30	—	—	V
Drain Cut-off Current		IDSS	VDS = -30V, VGS = 0	—	—	-10	μA
Gate Threshold Voltage		Vth	VDS = -3V, ID = -0.1mA	-0.5	—	-1.5	V
Forward Transfer Admittance		Yfs	VDS = -3V, ID = -50mA	100	—	—	mS
Drain-Source ON Resistance		RDS(ON)	ID = -50mA, VGS = -2.5V	—	2.4	4	Ω
Input Capacitance		Ciss	VDS = -3V, VGS = 0, f = 1MHz	—	92	—	pF
Reverse Transfer Chapacitance		Crss	VDS = -3V, VGS = 0, f = 1MHz	—	36	—	pF
Output Capacitance		Coss	VDS = -3V, VGS = 0, f = 1MHz	—	80	—	pF
Switching Time	Turn-on Time	ton	VDD = -3V, ID = -10mA VGS = 0 ~ -2.5V	—	0.06	—	μs
	Turn-off Time	toff	VDD = -3V, ID = -10mA VGS = 0 ~ -2.5V	—	0.15	—	

