

TOSHIBA FIELD EFFECT TRANSISTOR SILICON N CHANNEL MOS TYPE

2SK982

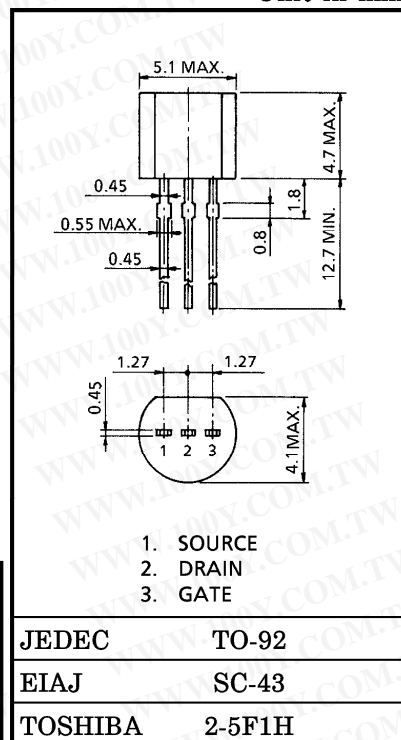
Unit in mm

HIGH SPEED SWITCHING APPLICATIONS
 ANALOG SWITCH APPLICATIONS
 INTERFACE APPLICATIONS

- Excellent Switching Times : $t_{on} = 14 \text{ ns}$ (Typ.)
- High Forward Transfer Admittance
 : $|Y_{fs}| = 100 \text{ mS}$ (Min.) @ $I_D = 50 \text{ mA}$
- Low On Resistance
 : $R_{DS(ON)} = 0.6 \Omega$ (Typ.) @ $I_D = 50 \text{ mA}$
- Enhancement-Mode
- Complementary to 2SJ148

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Drain-Source Voltage		V_{DS}	60	V
Gate-Source Voltage		V_{GSS}	± 20	V
Drain Current	DC	I_D	200	mA
	Pulse	I_{DP}	800	
Drain Power Dissipation ($T_a = 25^\circ\text{C}$)		P_D	400	mW
Channel Temperature		T_{ch}	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55~150	$^\circ\text{C}$



Weight : 0.21 g

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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current		IGSS	VGS = ±10 V, VDS = 0	—	—	±100	nA
Drain Cut-off Current		IDSS	VDS = 60 V, VGS = 0	—	—	10	μA
Drain-Source Breakdown Voltage		V(BR) DSS	ID = 1 mA, VGS = 0	60	—	—	V
Gate Threshold Voltage		Vth	VDS = 10 V, ID = 1 mA	2	—	3.5	V
Forward Transfer Admittance		Yfs	VDS = 10 V, ID = 50 mA	100	—	—	mS
Drain-Source ON Resistance		RDS(ON)	ID = 50 mA, VGS = 10 V	—	0.6	1.0	Ω
Drain-Source ON Voltage		VDS(ON)	ID = 50 mA, VGS = 10 V	—	30	50	mV
Input Capacitance		Ciss	VDS = 10 V, VGS = 0, f = 1 MHz	—	55	65	pF
Reverse Transfer Capacitance		Crss	VDS = 10 V, VGS = 0, f = 1 MHz	—	13	18	pF
Output Capacitance		Coss	VDS = 10 V, VGS = 0, f = 1 MHz	—	40	50	pF
Switching Time	Rise Time	tr		—	8	—	ns
	Turn-on Time	ton		—	14	—	
	Fall Time	tf		—	35	—	
	Turn-off Time	ttoff		—	75	—	

This transistor is the electrostatic sensitive device.
 Please handle with caution.

