

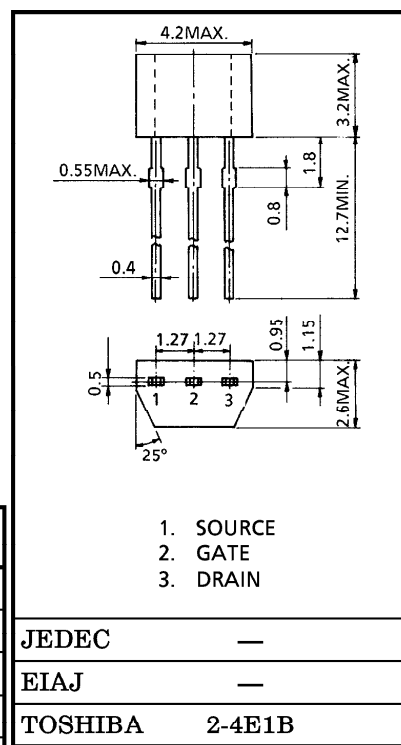
TOSHIBA FIELD EFFECT TRANSISTOR SILICON P CHANNEL JUNCTION TYPE

2SJ105

FOR AUDIO AMPLIFIER, ANALOG SWITCH, CONSTANT CURRENT AND
IMPEDANCE CONVERTER APPLICATIONS

Unit in mm

- High Breakdown Voltage : $V_{GDS}=50V$
- High Input Impedance : $I_{GSS}=1.0nA$ (Max.) ($V_{GS}=30V$)
- Low $R_{DS(ON)}$: $R_{DS(ON)}=270\Omega$ (Typ.) ($I_{DSS}=-5mA$)
- Complimentary to 2SK330
- Small Package

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Gate-Drain Voltage	V_{GDS}	50	V
Gate Current	I_G	-10	mA
Drain Power Dissipation	P_D	200	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	-55~125	$^\circ C$

JEDEC	—
EIAJ	—
TOSHIBA	2-4E1B

Weight : 0.13g

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Cut-off Current	I_{GSS}	$V_{GS}=30V, V_{DS}=0$	—	—	1.0	nA
Gate-Drain Breakdown Voltage	$V_{(BR)GDS}$	$V_{DS}=0, I_G=100\mu A$	50	—	—	V
Drain Current	I_{DSS} (Note)	$V_{DS}=-10V, V_{GS}=0$	-1.2	—	-14	mA
Gate-Source Cut-off Voltage	$V_{GS(OFF)}$	$V_{DS}=-10V, I_D=-0.1\mu A$	0.3	—	6.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=-10V, V_{GS}=0, f=1kHz$	1.0	4.0	—	mS
Drain-Source ON Resistance	$R_{DS(ON)}$	$V_{DS}=-10mV, V_{GS}=0$ $I_{DSS}=-5mA$	—	270	—	Ω
Input Capacitance	C_{iss}	$V_{DS}=-10V, V_{GS}=0, f=1MHz$	—	18	—	pF
Reverse Transfer Capacitance	C_{rss}	$V_{DG}=-10V, I_D=0, f=1MHz$	—	3.6	—	pF

Note : I_{DSS} Classification Y : -1.2~-3.0mA, GR : -2.6~-6.5mA, BL : -6~-14mA

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