

TOSHIBA FIELD EFFECT TRANSISTOR SILICON P CHANNEL JUNCTION TYPE

2SJ106

AUDIO FREQUENCY AMPLIFIER APPLICATIONS
ANALOG SWITCH APPLICATIONS
CONSTANT CURRENT APPLICATIONS
IMPEDANCE CONVERTER APPLICATIONS

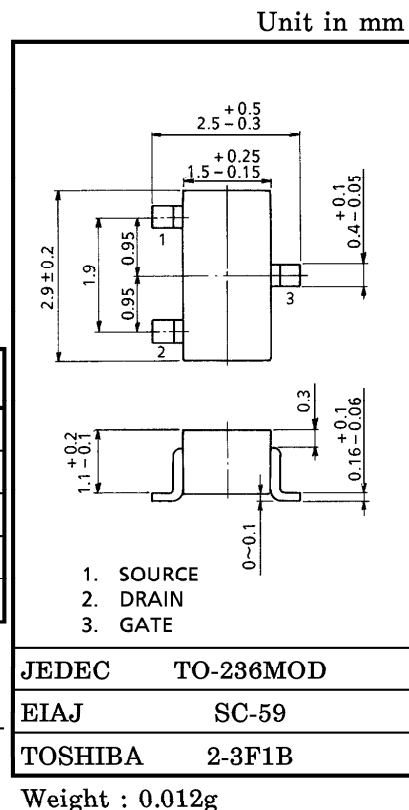
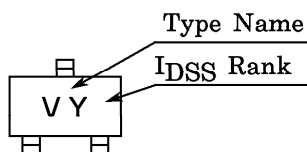
- High Breakdown Voltage : $V_{GDS}=50V$
- High Input Impedance : $I_{GSS}=1.0nA$ (Max.) ($V_{GS}=30V$)
- Low R_{DS} (ON) : R_{DS} (ON) = 270 Ω (Typ.)
($I_{DSS}=-5mA$)

- 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	150	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	-55~125	$^\circ C$

Marking



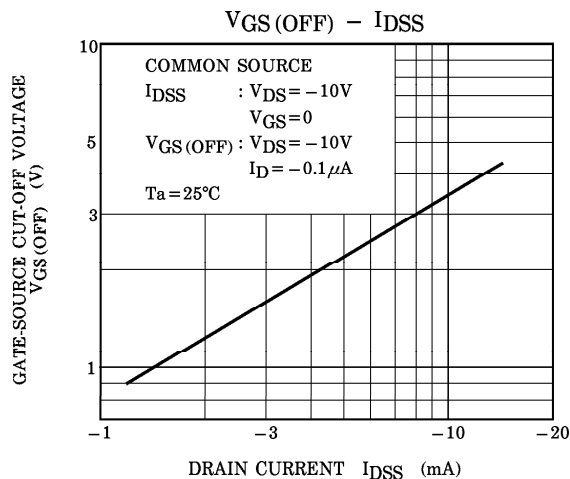
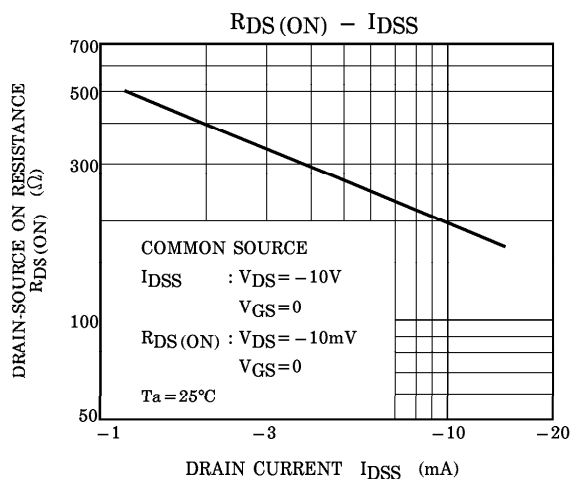
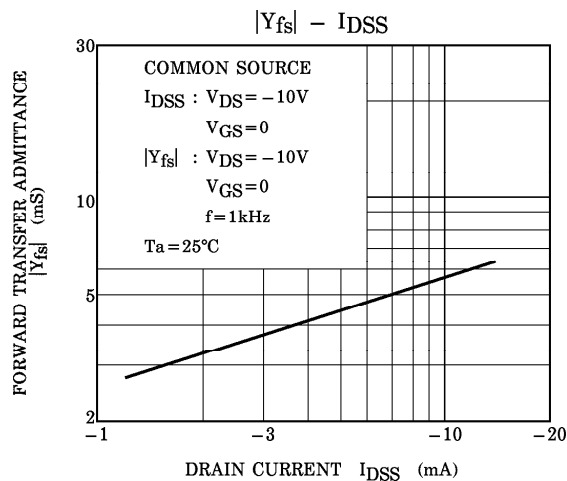
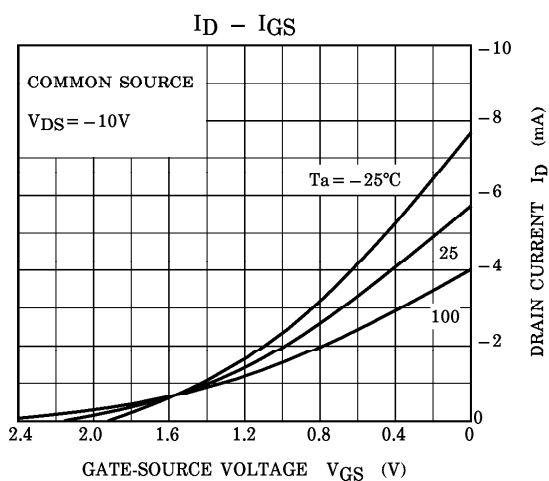
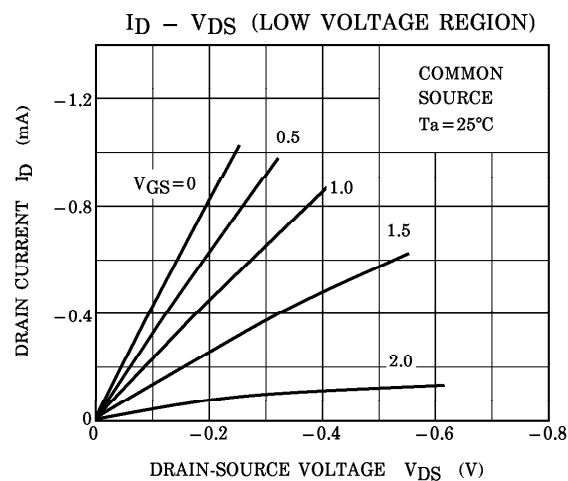
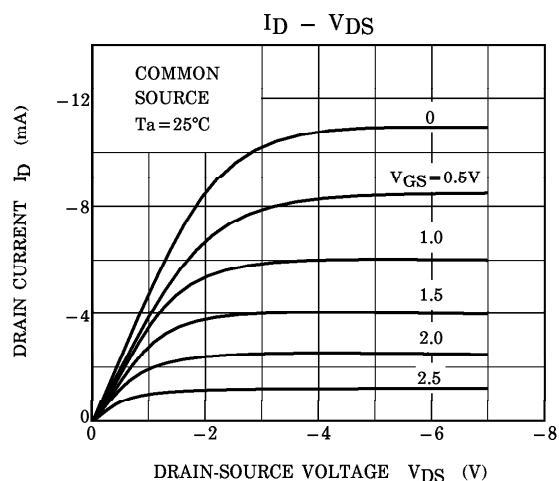
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

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 (G) : -2.6~-6.5mA,
BL (L) : -6~-14mA

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