

TOSHIBA FIELD EFFECT TRANSISTOR SILICON P CHANNEL JUNCTION TYPE

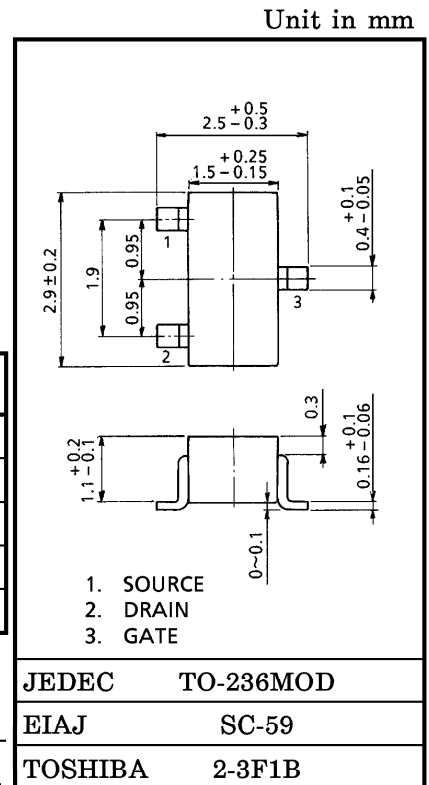
# 2SJ106

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

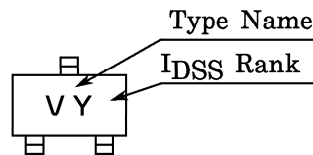
- High Breakdown Voltage :  $V_{GDS}=50V$
- High Input Impedance :  $I_{GSS}=1.0nA$  (Max.) ( $V_{GS}=30V$ )
- Low  $R_{DS}$  (ON) :  $R_{DS}$  (ON) = 270Ω (Typ.)  
( $I_{DSS} = -5mA$ )
- Small Package

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	$^\circ C$



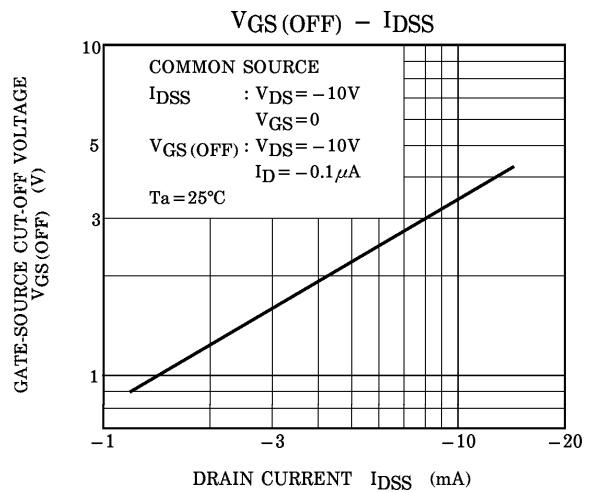
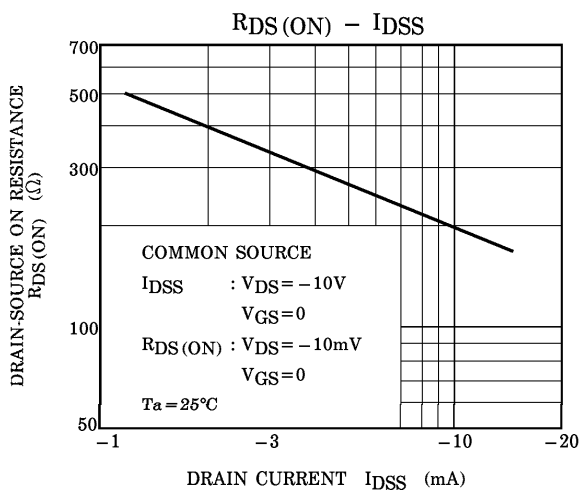
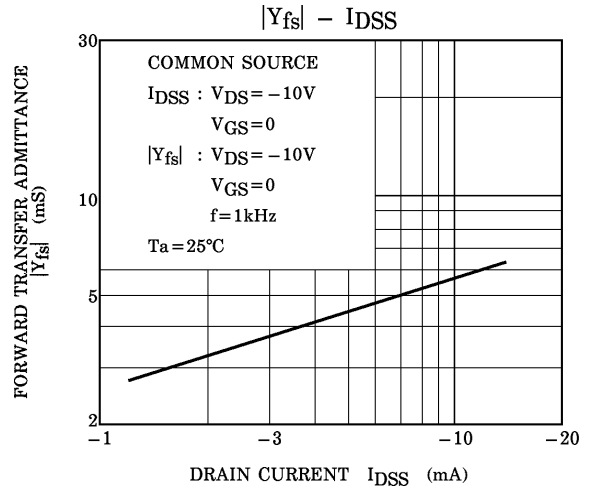
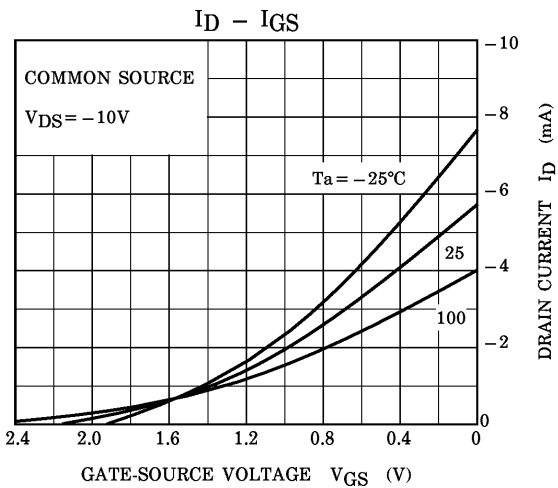
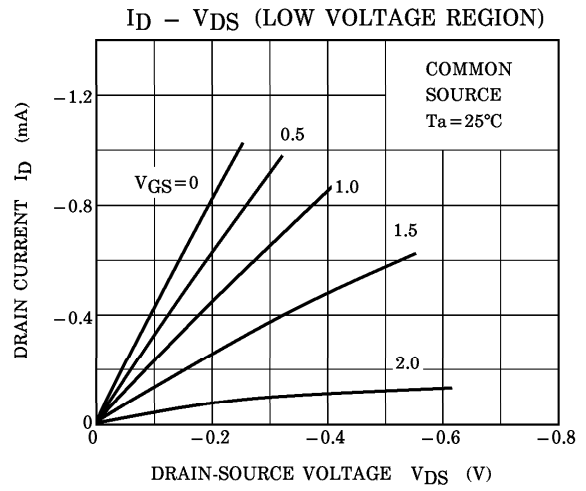
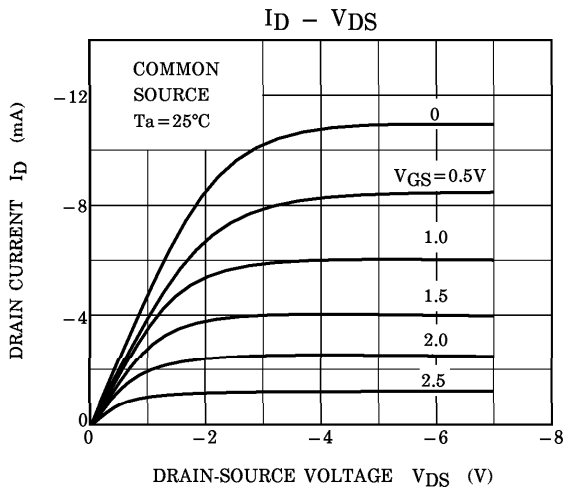
Marking

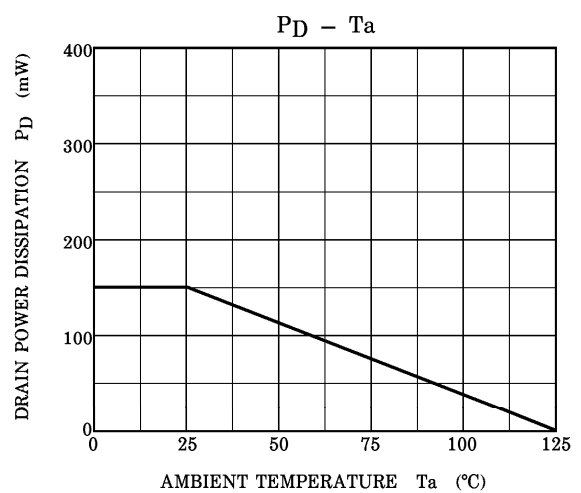
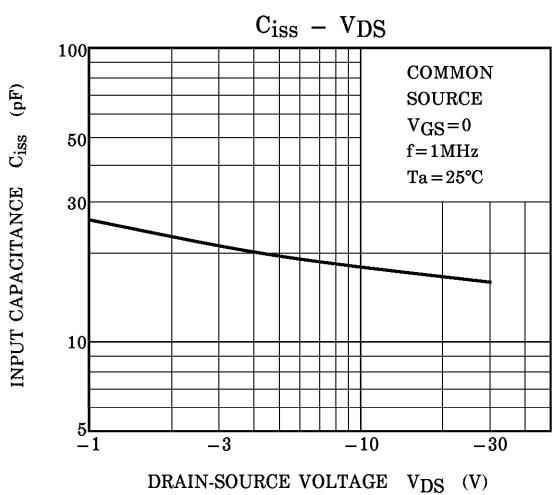
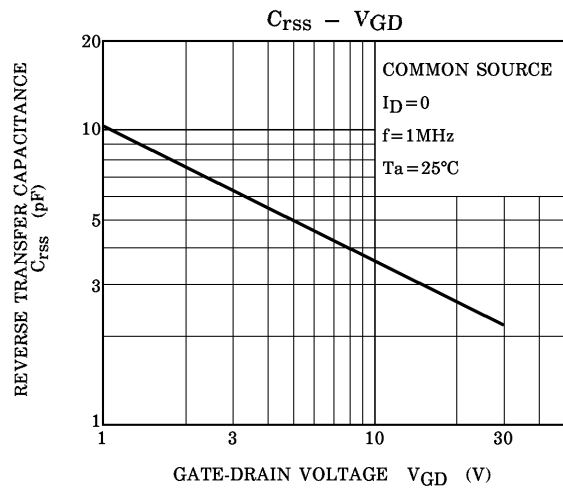
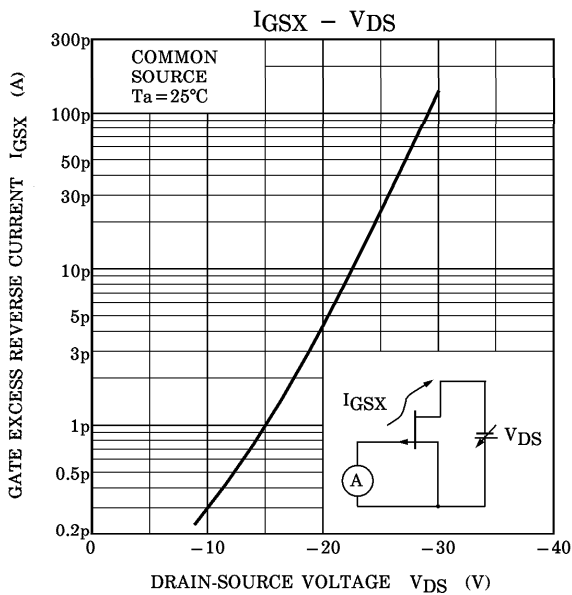
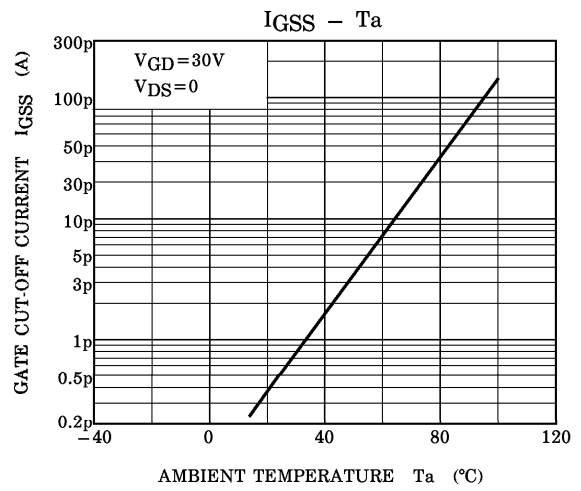
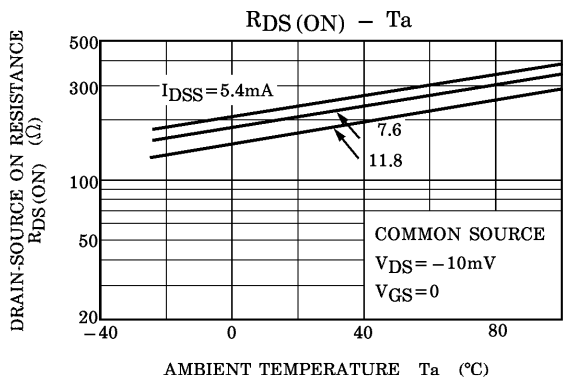


ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

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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