

TOSHIBA FIELD EFFECT TRANSISTOR SILICON N CHANNEL JUNCTION TYPE

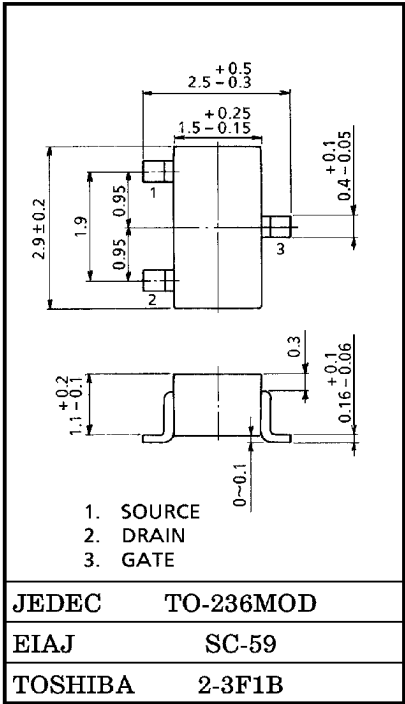
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AUDIO FREQUENCY AND HIGH VOLTAGE AMPLIFIER APPLICATIONS
CONSTANT CURRENT APPLICATIONS

- High Breakdown Voltage : $V_{GDS} = -100V$ (Min.)
- High Input Impedance : $I_{GSS} = -1.0nA$ (Max.) ($V_{GS} = -80V$)
- Small Package

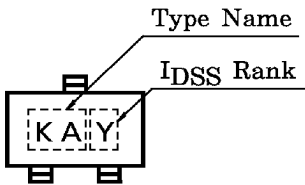
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Gate-Drain Voltage	V_{GDS}	-100	V
Gate Current	I_G	10	mA
Drain Power Dissipation	P_D	150	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	-55~125	°C



Weight : 0.012g

Marking



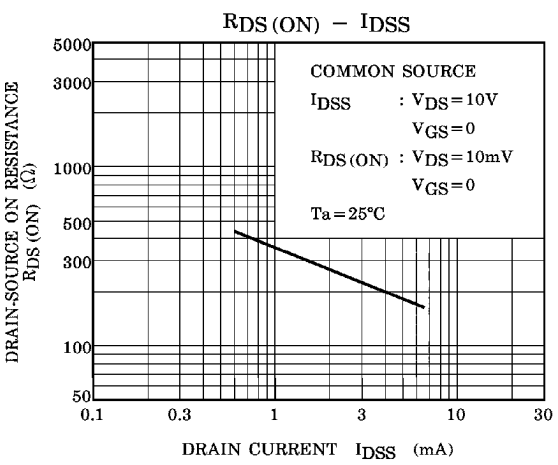
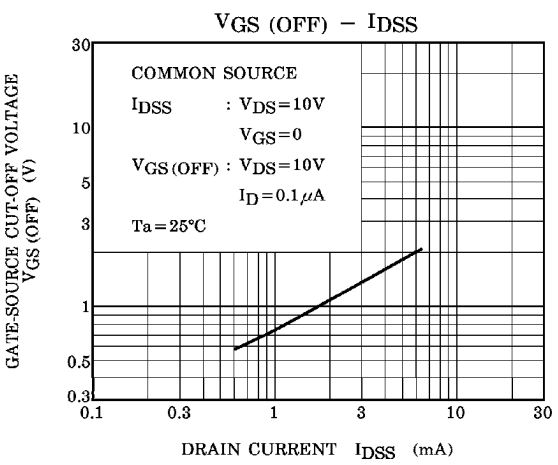
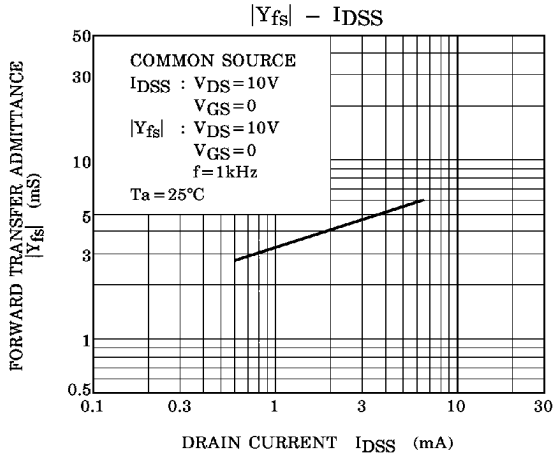
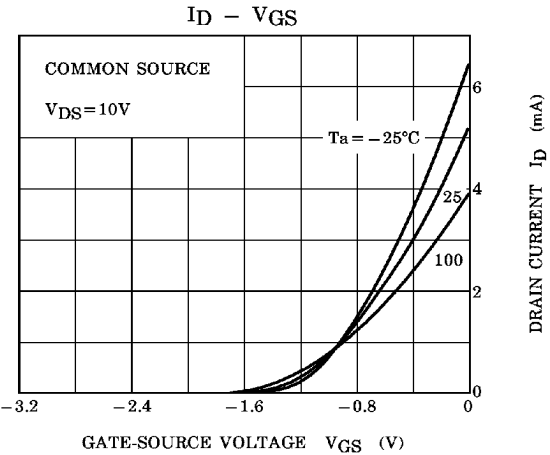
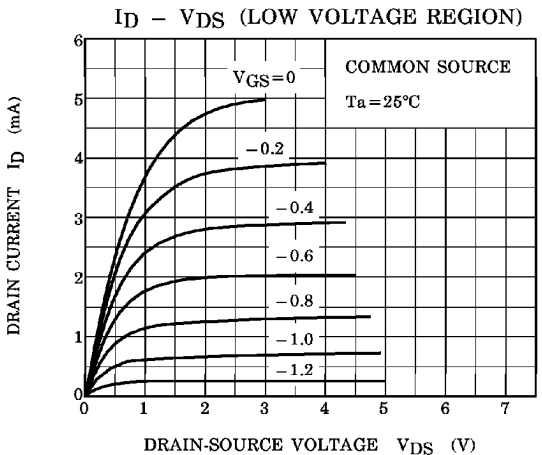
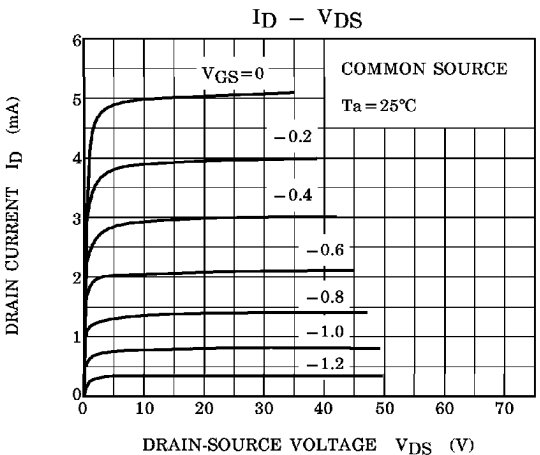
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Cut-off Current	I_{GSS}	$V_{GS} = -80V, V_{DS} = 0$	—	—	-1.0	nA
Gate-Drain Breakdown Voltage	$V_{(BR) GDS}$	$V_{DS} = 0, I_G = -100\mu A$	-100	—	—	V
Drain Current	I_{DSS} (Note)	$V_{DS} = 10V, V_{GS} = 0$	0.6	—	6.5	mA
Gate-Source Cut-off Voltage	$V_{GS} (OFF)$	$V_{DS} = 10V, I_D = 0.1\mu A$	-0.4	—	-3.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	1.5	4.6	—	mS
Input Capacitance	C_{iss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$	—	13	—	pF
Reverse Transfer Capacitance	C_{rss}	$V_{DG} = 10V, I_D = 0, f = 1MHz$	—	3	—	pF
Noise Figure	NF	$V_{DS} = 10V, V_{GS} = 0$ $R_G = 100k\Omega, f = 100Hz$	—	0.5	—	dB

Note : I_{DSS} Classification O : 0.6~1.4mA, Y : 1.2~3.0mA, GR (G) : 2.6~6.5mA

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