

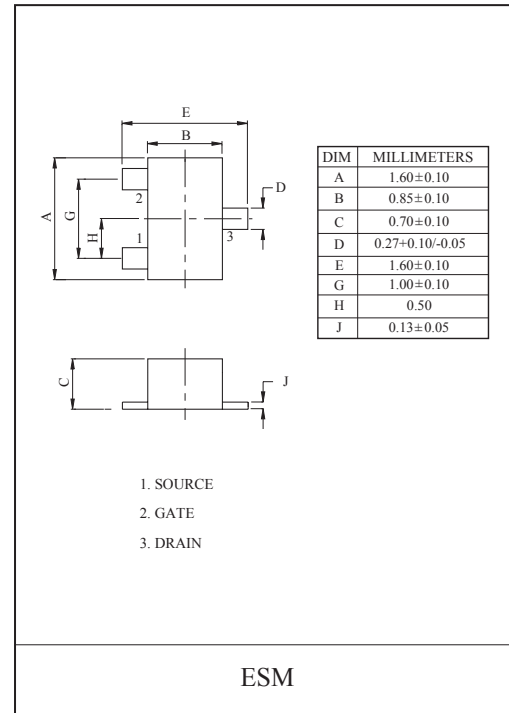
ULTRA-HIGH SPEED SWITCHING APPLICATIONS  
ANALOG SWITCH APPLICATIONS

### FEATURES

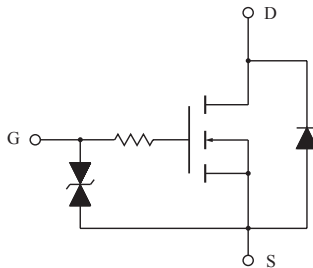
- 2.5 Gate Drive.
- Low Threshold Voltage :  $V_{th}=0.5 \sim 1.5V$ .
- High Speed.
- Small Package.
- Enhancement-Mode.

### MAXIMUM RATING (Ta=25 °C)

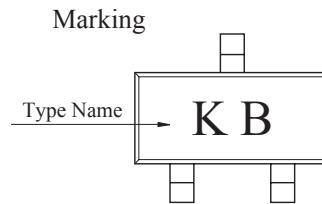
CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	$V_{DS}$	30	V
Gate-Source Voltage	$V_{GSS}$	20	V
DC Drain Current	$I_D$	100	mA
Drain Power Dissipation	$P_D$	100	mW
Channel Temperature	$T_{ch}$	150	
Storage Temperature Range	$T_{stg}$	-55 ~ 150	



### EQUIVALENT CIRCUIT

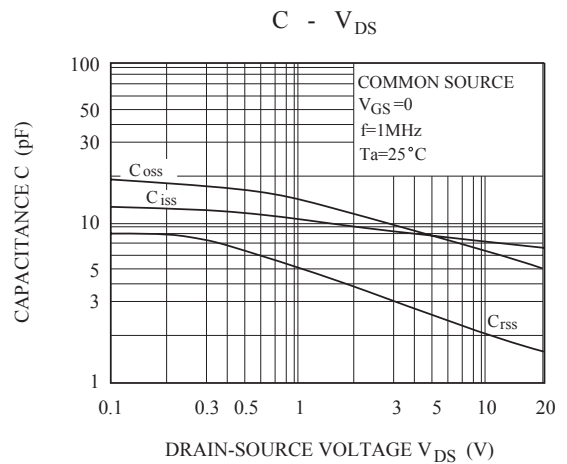
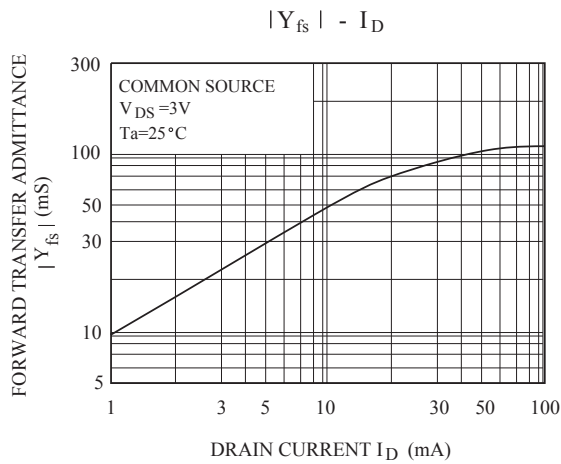
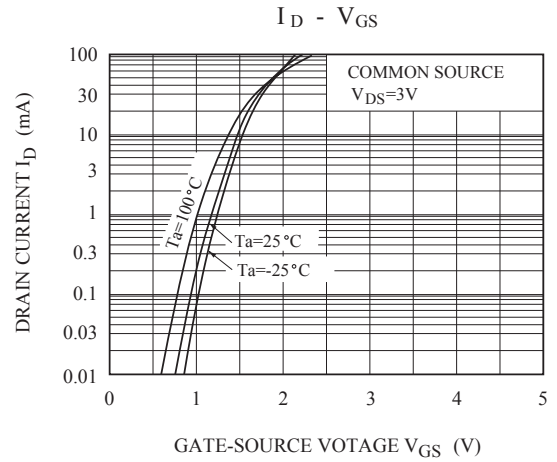
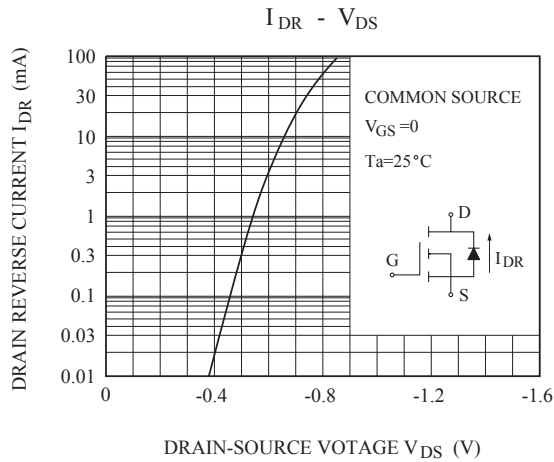
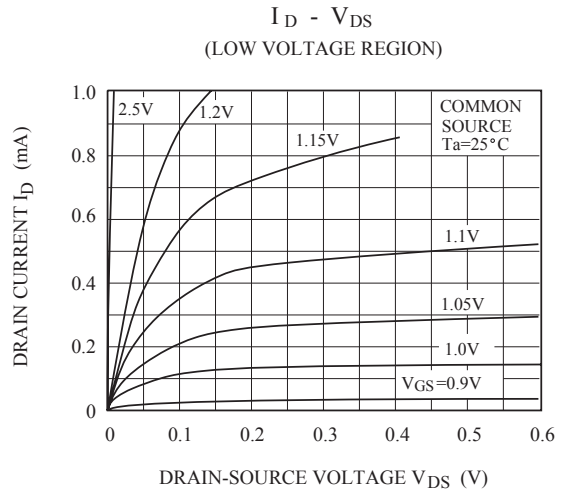
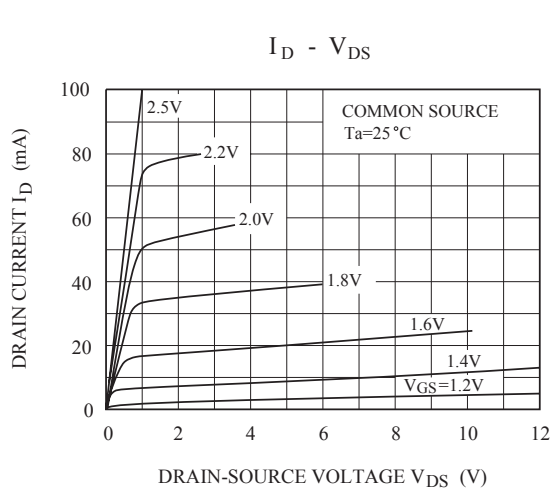


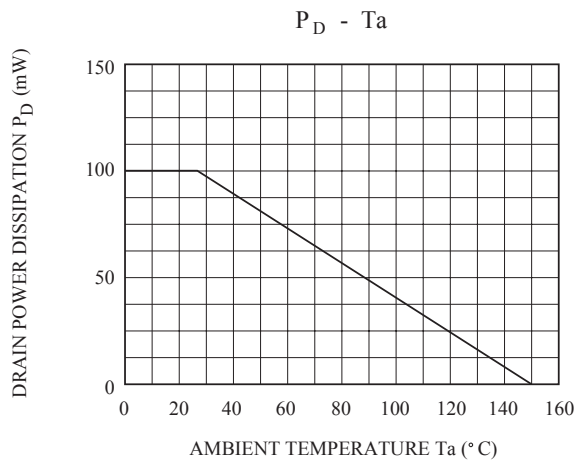
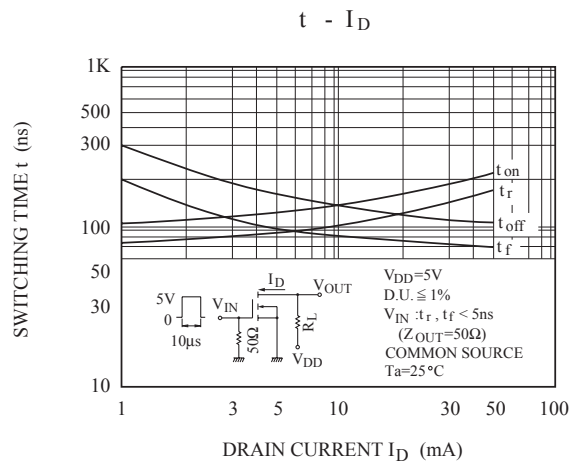
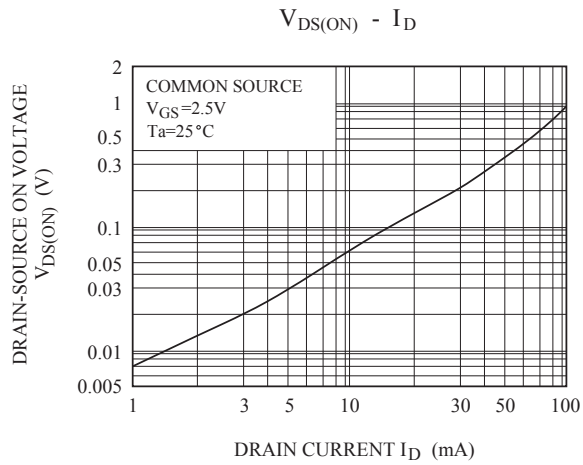
THIS TRANSISTOR IS ELECTROSTATIC SENSITIVE DEVICE.  
PLEASE HANDLE WITH CAUTION.



### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	$I_{GSS}$	$V_{GS}=16V, V_{DS}=0V$	-	-	1	A
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D=100 \mu A, V_{GS}=0V$	30	-	-	V
Drain Cut-off Current	$I_{DSS}$	$V_{DS}=30V, V_{GS}=0V$	-	-	1	A
Gate Threshold Voltage	$V_{th}$	$V_{DS}=3V, I_D=0.1mA$	0.5	-	1.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=3V, I_D=10mA$	25	-	-	mS
Drain-Source ON Resistance	$R_{DS(ON)}$	$I_D=10mA, V_{GS}=2.5V$	-	4	7	
Input Capacitance	$C_{iss}$	$V_{DS}=3V, V_{GS}=0V, f=1MHz$	-	8.5	-	pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS}=3V, V_{GS}=0V, f=1MHz$	-	3.3	-	pF
Output Capacitance	$C_{oss}$	$V_{DS}=3V, V_{GS}=0V, f=1MHz$	-	9.3	-	pF
Switching Time	Turn-on Time	$t_{on}$	-	50	-	nS
	Turn-off Time	$t_{off}$		180	-	nS





## SWITCHING TIME TEST CIRCUIT

