

9097250 TOSHIBA (DISCRETE/OPTO)

查询"2SK529"供应商

99D 16698 DT39-09



SEMICONDUCTOR

TECHNICAL DATA

TOSHIBA FIELD EFFECT TRANSISTOR

2SK529

SILICON N CHANNEL MOS TYPE  
( $\pi$ -MOS)

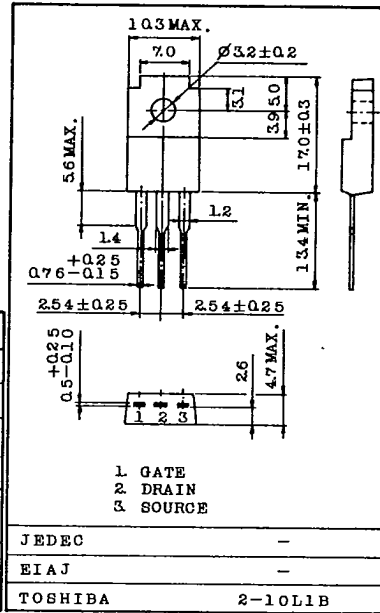
HIGH SPEED, HIGH VOLTAGE SWITCHING APPLICATIONS.  
SWITCHING REGULATOR, DC-DC CONVERTER AND MOTOR  
DRIVE APPLICATIONS.

FEATURES:

- High Breakdown Voltage :  $V_{(BR)DSS}=450V$
- High Forward Transfer Admittance:  $|Y_{fs}|=1.2S$ (Typ.)
- Low Leakage Current :  $I_{GSS}=\pm 100nA$ (Max.) @  $V_{GS}=\pm 20V$   
 $I_{DSS}=1mA$ (Max.) @  $V_{DS}=450V$
- Enhancement-Mode :  $V_{th}=1.5\sim 3.5V$  @  $I_D=1mA$
- TO-220 Isolation Package Which Requires Neither  
Insulating Bushing Nor Mica Insulator.

INDUSTRIAL APPLICATIONS

Unit in mm



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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	$V_{DSX}$	450	V
Gate-Source Voltage	$V_{GSS}$	$\pm 20$	V
Drain Current	DC	$I_D$	2
	Pulse	$I_{DP}$	4
Drain Power Dissipation ( $T_c=25^\circ C$ )	$P_D$	30	W
Channel Temperature	$T_{ch}$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ C$

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

Weight : 2.1g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Gate Leakage Current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0$	-	-	$\pm 100$	nA		
Drain Cut-off Current	$I_{DSS}$	$V_{DS}=450V, V_{GS}=0$	-	-	1.0	mA		
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D=10mA, V_{GS}=0$	450	-	-	V		
Gate Threshold Voltage	$V_{th}$	$V_{DS}=10V, I_D=1mA$	1.5	-	3.5	V		
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=1A$	0.6	1.2	-	S		
Drain-Source ON Resistance	$R_{DS(ON)}$	$I_D=1A, V_{GS}=10V$	-	1.8	2.6	$\Omega$		
Drain-Source ON Voltage	$V_{DS(ON)}$	$I_D=4A, V_{GS}=10V$	-	9.0	15	V		
Input Capacitance	$C_{iss}$	$V_{DS}=10V, V_{GS}=0, f=1MHz$	-	410	600	pF		
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS}=10V, V_{GS}=0, f=1MHz$	-	35	70	pF		
Output Capacitance	$C_{oss}$	$V_{DS}=10V, V_{GS}=0, f=1MHz$	-	115	170	pF		
Switching Time	Rise Time	$t_r$			-	20	40	ns
	Turn-on Time	$t_{on}$			-	30	60	ns
	Fall Time	$t_f$			-	35	70	ns
	Turn-off Time	$t_{off}$	$V_{IN}: t_r, t_f < 5ns$ $D.U \leq 1\%$ ( $Z_{OUT}=50\Omega$ )		-	100	200	ns

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

TOSHIBA CORPORATION

GT1A2

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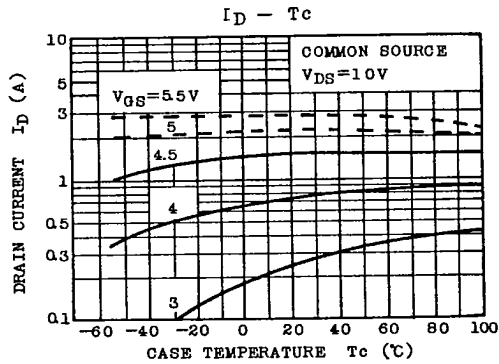
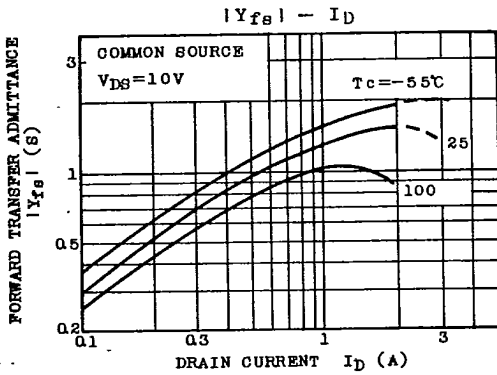
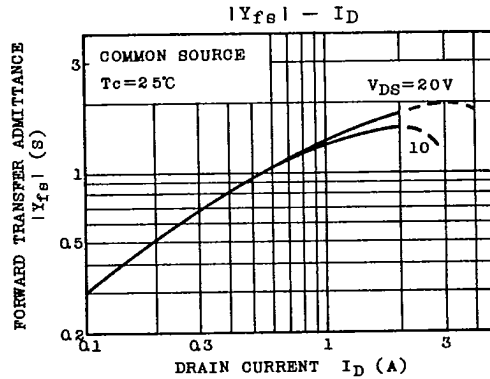
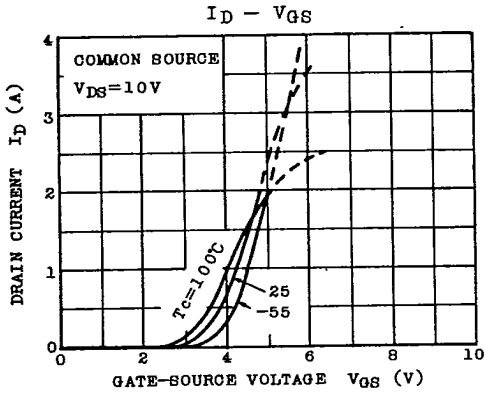
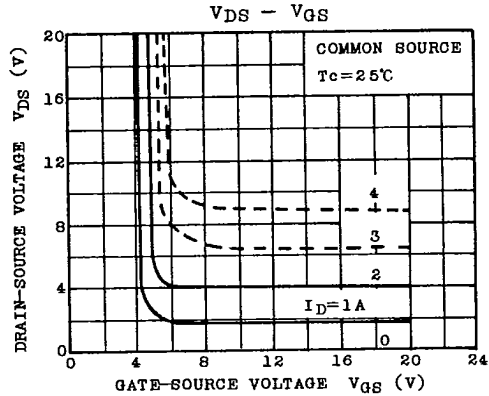
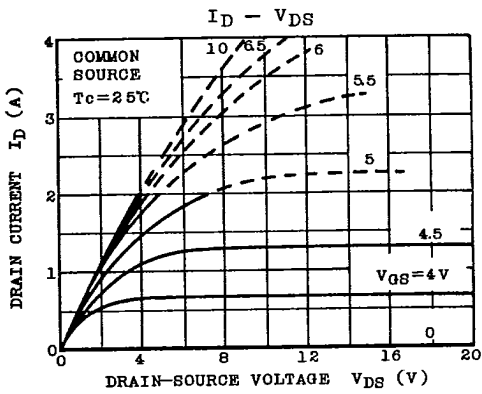
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