

9097250 TOSHIBA (DISCRETE/OPTO)

99D 16689 DT-39-11



SEMICONDUCTOR

TECHNICAL DATA

TOSHIBA FIELD EFFECT TRANSISTOR

2SK526

SILICON N CHANNEL MOS TYPE

(π-MOS)

INDUSTRIAL APPLICATIONS

Unit in mm

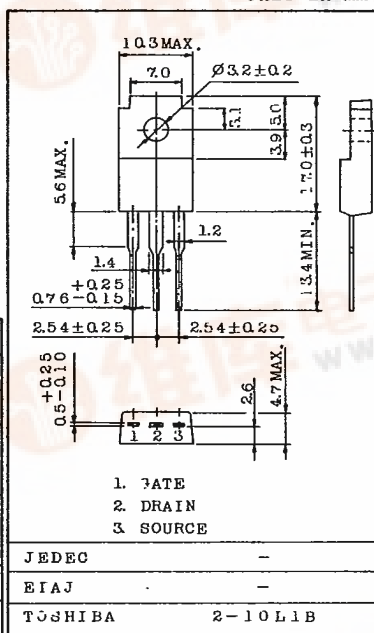
HIGH SPEED, HIGH VOLTAGE SWITCHING APPLICATIONS.
DC-DC CONVERTER, MOTOR AND SOLENOID DRIVE APPLICATIONS.

FEATURES:

- Low Drain-Source ON Resistance : $R_{DS(ON)}=0.4\Omega$ (Typ.)
- High Forward Transfer Admittance: $|Y_{fs}|=4S$ (Typ.)
- High Drain Current : $I_{DP}=15A$ (Max.)
- Low Leakage Current: $I_{GSS}=\pm 100nA$ (Max.) @ $V_{GS}=\pm 20V$
 $I_{DSS}=1mA$ (Max.) @ $V_{DS}=250V$
- Enhancement-Mode : $V_{th}=1.5\sim 3.5V$ @ $I_D=1mA$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DSX}	250	V
Gate-Source Voltage	V_{GSS}	± 20	V
Drain Current	DC	I_D	10
	Pulse	I_{DP}	15
Drain Power Dissipation	$T_a=25^\circ C$	P_D	2.0
	$T_c=25^\circ C$		40
Channel Temperature	T_{ch}	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ C$



Weight : 2.1g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Gate Leakage Current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0$	-	-	± 100	nA		
Drain Cut-off Current	I_{DSS}	$V_{DS}=250V, V_{GS}=0$	-	-	1.0	mA		
Drain-Source Breakdown Voltage	$V(BR)_{DSS}$	$I_D=10mA, V_{GS}=0$	250	-	-	V		
Gate Threshold Voltage	V_{th}	$V_{DS}=10V, I_D=1mA$	1.5	-	3.5	V		
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=5A$	2.0	4.0	-	S		
Drain-Source ON Resistance	$R_{DS(ON)}$	$I_D=5A, V_{GS}=10V$	-	0.4	0.6	Ω		
Drain-Source ON Voltage	$V_{DS(ON)}$	$I_D=10A, V_{GS}=10V$	-	4.5	7	V		
Input Capacitance	C_{iss}	$V_{DS}=10V, V_{GS}=0, f=1MHz$	-	660	900	pF		
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=10V, V_{GS}=0, f=1MHz$	-	80	150	pF		
Output Capacitance	C_{oss}	$V_{DS}=10V, V_{GS}=0, f=1MHz$	-	260	400	pF		
Switching Time	Rise Time	t_r			-	50	100	ns
	Turn-on Time	t_{on}	-	70	140			
	Fall Time	t_f	-	60	120			
	Turn-off Time	t_{off}	-	160	320			

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

TOSHIBA CORPORATION

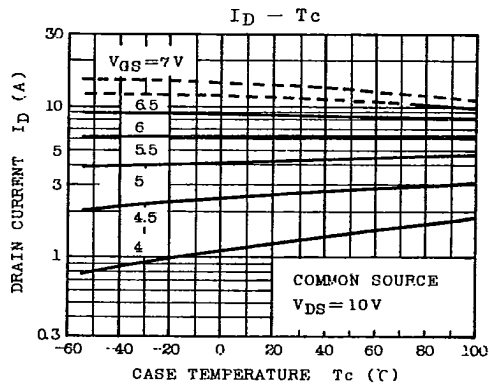
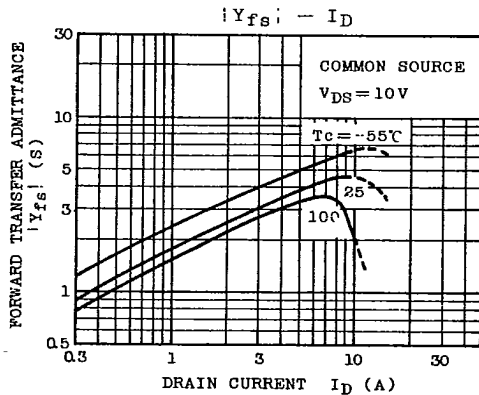
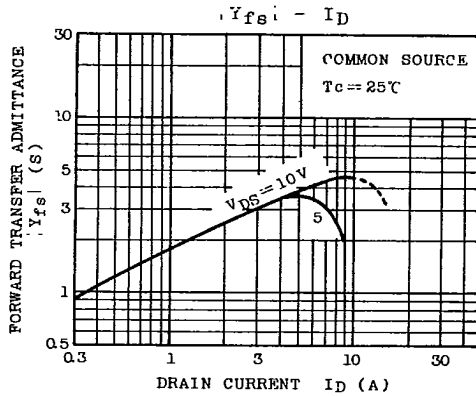
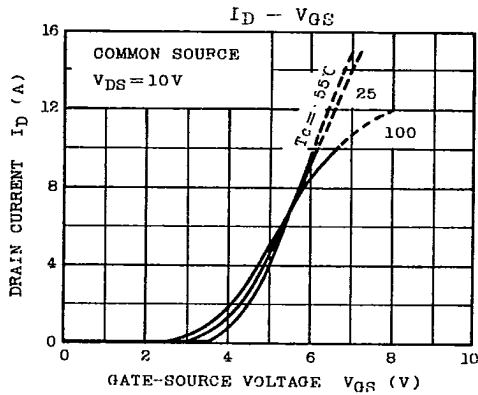
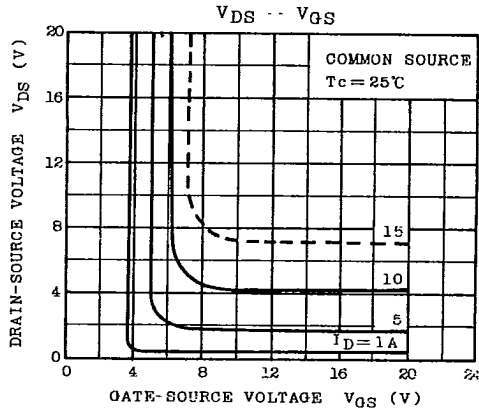
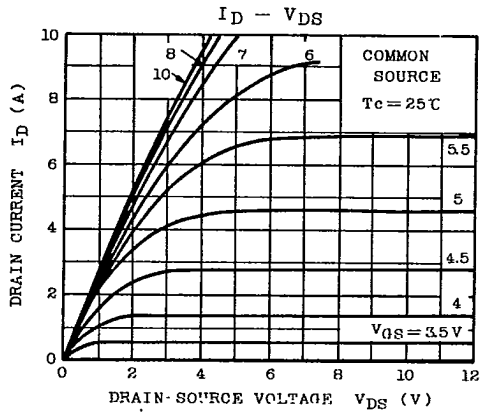
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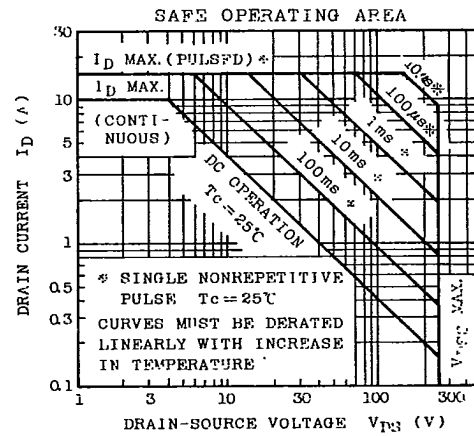
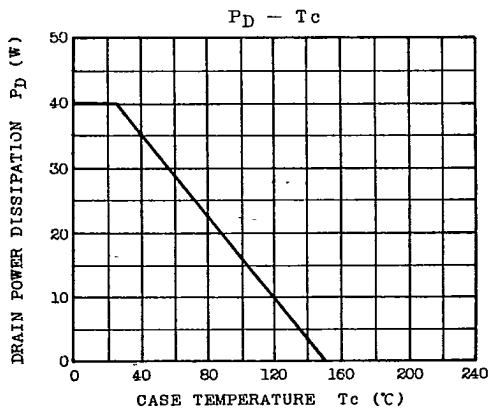
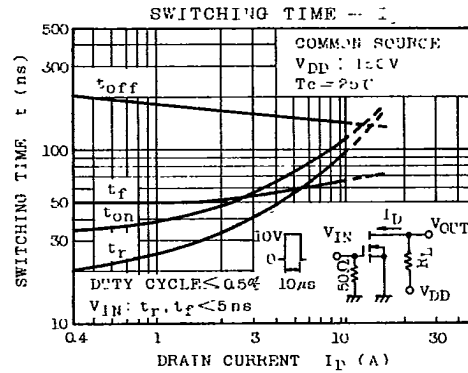
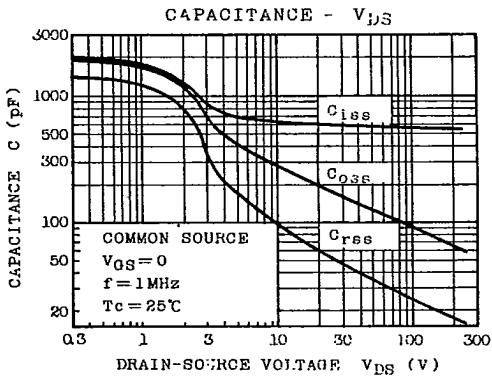
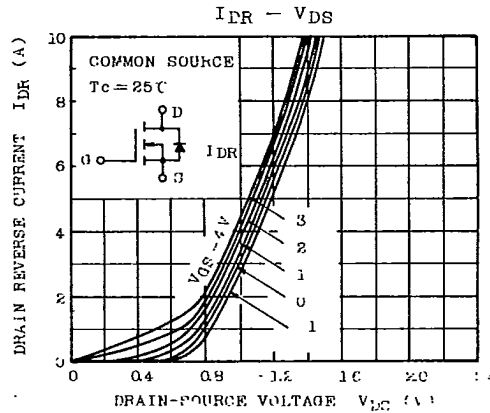
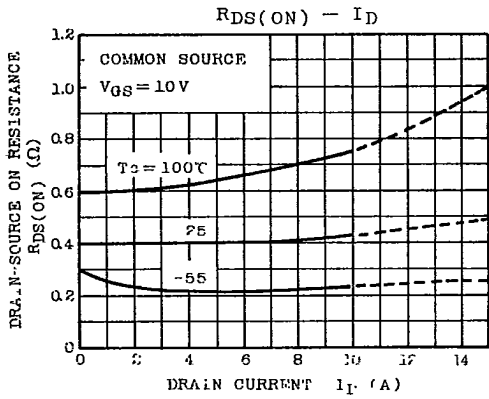


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