

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

FEATURES:

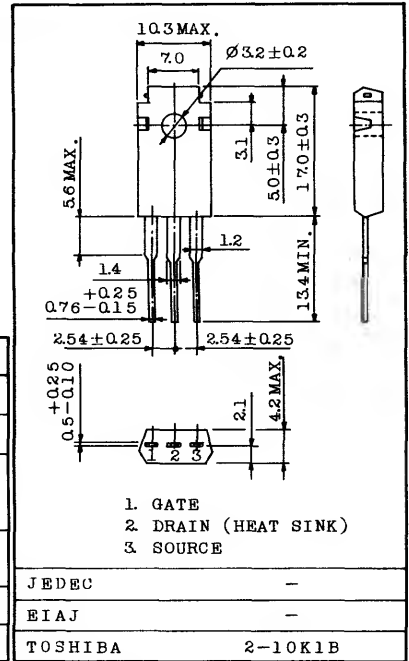
- . High Breakdown Voltage : $V_{(BR)DSS}=400V$
- . High Forward Transfer Admittance : $|Y_{fs}|=2.5S$ (Typ.)
- . Low Leakage Current : $I_{GSS}=\pm 100nA$ (Max.) @ $V_{GS}=\pm 20V$
 $I_{DSS}=1mA$ (Max.) @ $V_{DS}=400V$
- . Enhancement-Mode : $V_{th}=1.5 \sim 3.5V$ @ $I_D=1mA$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DSX}	400	V
Gate-Source Voltage	V_{GSS}	± 20	V
Drain Current	DC	I_D	5
	Pulse	I_{DP}	8
Drain Power Dissipation ($T_c=25^\circ C$)	P_D	60	W
Channel Temperature	T_{ch}	150	$^\circ C$
Storage Temperature Range	T_{stg}	$-55 \sim 150$	$^\circ C$

INDUSTRIAL APPLICATIONS

Unit in mm



Weight : 2.0g

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}	$V_{DS}=400V, V_{GS}=0$	-	-	1.0	mA	
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D=10mA, V_{GS}=0$	400	-	-	V	
Gate Threshold Voltage	V_{th}	$V_{DS}=10V, I_D=1mA$	1.5	-	3.5	V	
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=3A$	1.0	2.5	-	S	
Drain-Source ON Resistance	$R_{DS(ON)}$	$I_D=3A, V_{GS}=10V$	-	1.0	1.4	Ω	
Drain-Source ON Voltage	$V_{DS(ON)}$	$I_D=8A, V_{GS}=10V$	-	10	18	V	
Input Capacitance	C_{iss}	$V_{DS}=10V, V_{GS}=0, f=1MHz$	-	670	900	pF	
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=10V, V_{GS}=0, f=1MHz$	-	50	90	pF	
Output Capacitance	C_{oss}	$V_{DS}=10V, V_{GS}=0, f=1MHz$	-	180	250	pF	
Switching Time	Rise Time	t_r		-	25	50	ns
	Turn-on Time	t_{on}		-	40	80	ns
	Fall Time	t_f		-	35	70	ns
	Turn-off Time	t_{off}		-	140	280	ns

$V_{IN}: t_r, t_f < 5ns$
 $D, U \leq 1\%$ ($Z_{OUT}=50\Omega$)

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