

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

FEATURES:

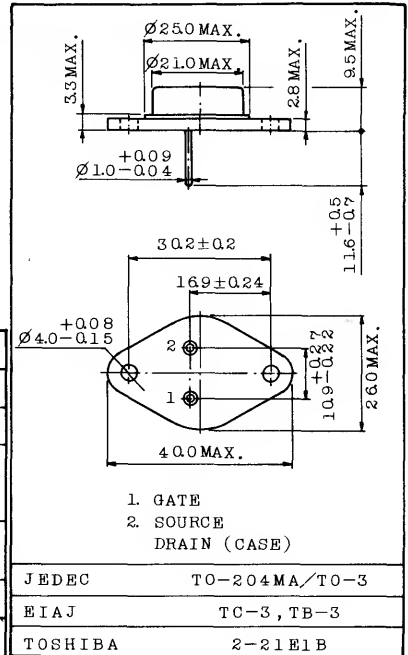
- . Low Drain-Source ON Resistance : $R_{DS(ON)}=0.12\Omega(\text{Typ.})$
- . High Forward Transfer Admittance : $|Y_{fs}|=6S(\text{Typ.})$
- . Low Leakage Current : $I_{GSS}=\pm 100nA(\text{Max.})$ @ $V_{GS}=\pm 20V$
 $I_{DSS}=1mA(\text{Max.})$ @ $V_{DS}=150V$
- . Enhancement-Mode : $V_{th}=1.5 \sim 3.5V$ @ $I_D=1mA$

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V _{DSX}	150	V
Gate-Source Voltage	V _{GSS}	±20	V
Drain Current	DC	I _D	12
	Pulse	I _{DP}	40
Drain Power Dissipation (Tc=25°C)	P _D	120	W
Channel Temperature	T _{ch}	150	°C
Storage Temperature Range	T _{stg}	-65 ~ 150	°C

INDUSTRIAL APPLICATIONS

Unit in mm



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	I _{GSS}	V _{GS} =±20V, V _{DS} =0	-	-	±100	nA
Drain Cut-off Current	I _{DSS}	V _{DS} =150V, V _{GS} =0	-	-	1.0	mA
Drain-Source Breakdown Voltage	V(BR) _{DSS}	I _D =10mA, V _{GS} =0	150	-	-	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 =10A	3	6	-	S
Drain-Source ON Resistance	R _{DS(ON)}	I _D =10A, V _{GS} =10V	-	0.12	0.18	Ω
Drain-Source ON Voltage	V _{DS(ON)}	I _D =10A, V _{GS} =10V	-	1.2	1.8	V
Input Capacitance	C _{iss}	V _{DS} =10V, V _{GS} =0, f=1MHz	-	1600	2200	pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =10V, V _{GS} =0, f=1MHz	-	350	600	pF
Output Capacitance	C _{oss}	V _{DS} =10V, V _{GS} =0, f=1MHz	-	800	1300	pF
Switching Time	Rise Time	t _r	-	120	260	ns
	Turn-on Time	t _{on}	-	150	300	ns
	Fall Time	t _f	-	120	240	ns
	Turn-off Time	t _{off}	-	300	600	ns