

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SD2481

PULSE MOTOR DRIVE, HAMMER DRIVE APPLICATIONS

SWITCHING APPLICATIONS

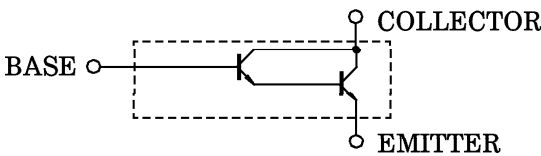
POWER AMPLIFIER APPLICATIONS

- High DC Current Gain : $h_{FE}=4000$ (Min.)
- Low Saturation Voltage : $V_{CE(sat)}=1.5V$ (Max.)

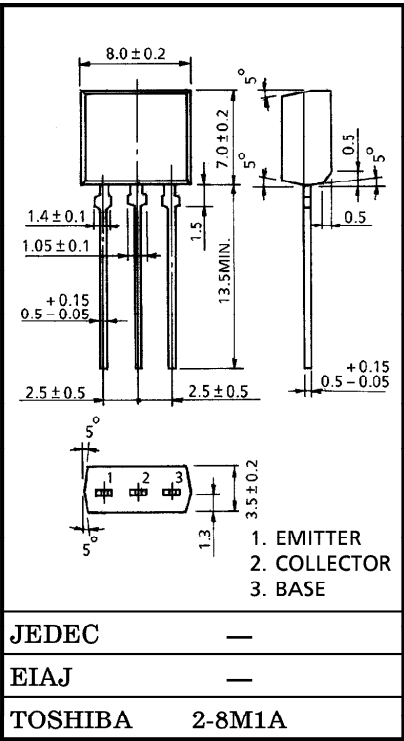
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Current	I_C	1.5	A
Base Current	I_B	0.15	A
Collector Power Dissipation	P_C	1.3	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

EQUIVALENT CIRCUIT



Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	2-8M1A

Weight : 0.55g (Typ.)

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=30V, I_E=0$	—	—	10	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=10V, I_C=0$	—	—	10	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	30	—	—	V
DC Current Gain	h_{FE}	$V_{CE}=2V, I_C=150mA$	4000	—	—	
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$ $I_C=1A, I_B=1mA$	—	—	1.5	V
	Base-Emitter	$V_{BE(sat)}$ $I_C=1A, I_B=1mA$	—	—	2.2	
Switching Time	Turn-On Time	t_{on}	—	0.18	—	μs
	Storage Time	t_{stg}	—	0.6	—	
	Fall Time	t_f	—	0.3	—	

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