

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SD2481

PULSE MOTOR DRIVE, HAMMER DRIVE APPLICATIONS

SWITCHING APPLICATIONS

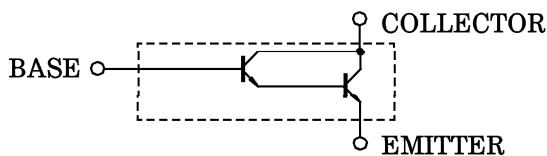
POWER AMPLIFIER APPLICATIONS

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

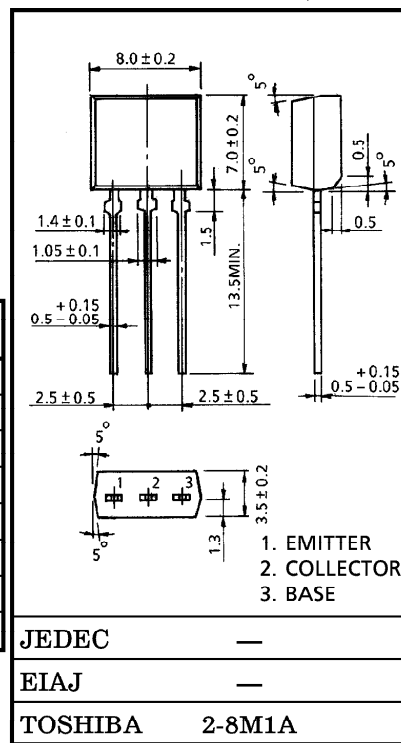
MAXIMUM RATINGS ($T_a = 25^\circ C$)

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	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

EQUIVALENT CIRCUIT



Unit in mm



Weight : 0.55g (Typ.)

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

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	$V_{CE(sat)}$	—	—	1.5	V
	Base-Emitter	$V_{BE(sat)}$	—	—	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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