

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SD2461

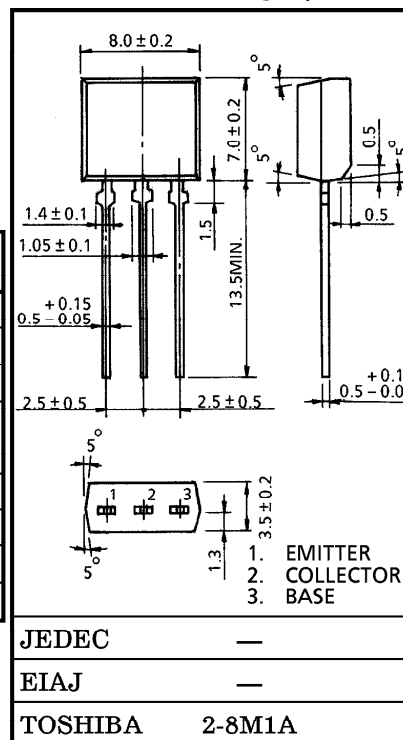
POWER AMPLIFIER APPLICATIONS

Unit in mm

- High DC Current Gain : $h_{FE(1)} = 800 \sim 3200$
- Low Collector Saturation Voltage : $V_{CE(sat)} = 0.3V$ (Typ.)

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	60	V
Collector-Emitter Voltage		V_{CEO}	60	V
Emitter-Base Voltage		V_{EBO}	7	V
Collector Current	DC	I_C	2	A
	Pulse	I_{CP}	4	
Base Current		I_B	0.4	A
Collector Power Dissipation		P_C	1.3	W
Junction Temperature		T_j	150	$^\circ C$
Storage Temperature Range		T_{stg}	$-55 \sim 150$	$^\circ C$



JEDEC	—
EIAJ	—
TOSHIBA	2-8M1A

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}	$V_{CB} = 60V, I_E = 0$	—	—	100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 7V, I_C = 0$	—	—	100	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 50mA, I_B = 0$	60	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5V, I_C = 0.1A$	800	—	3200	
	$h_{FE(2)}$	$V_{CE} = 5V, I_C = 1A$	350	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 0.5A, I_B = 5mA$	—	0.3	1.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 5V, I_C = 0.5A$	—	0.7	1.0	V
Transition Frequency	f_T	$V_{CE} = 5V, I_C = 0.5A$	—	17	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	—	30	—	pF

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