

**TOSHIBA**

**2SB1602**

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

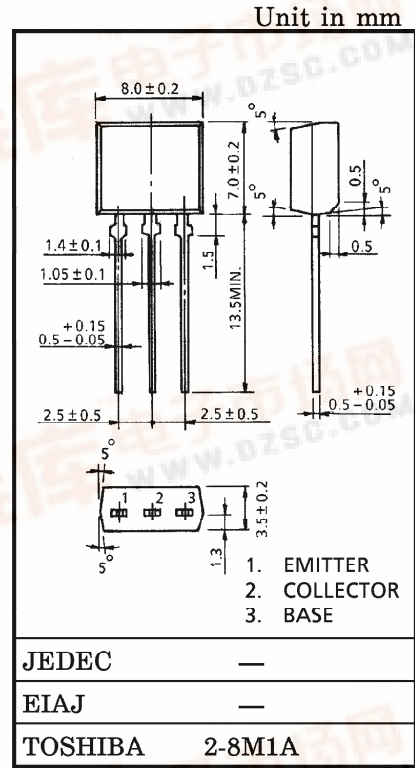
# 2SB1602

POWER AMPLIFIER APPLICATIONS

- High DC Current Gain  
:  $h_{FE(1)} = 300 \sim 1000$
- Low Collector Saturation Voltage  
:  $V_{CE(sat)} = -0.5V$  (Typ.)
- Complementary to 2SD2462

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	$I_C$	-3	A
	Pulse	$I_{CP}$	-6	
Base Current		$I_B$	-0.6	A
Collector Power Dissipation		$P_C$	1.3	W
Junction Temperature		$T_j$	150	$^\circ C$
Storage Temperature Range		$T_{stg}$	-55~150	$^\circ C$



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	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -7V, I_C = 0$	—	—	-100	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50mA, I_B = 0$	-60	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -5V, I_C = -0.5A$	300	—	1000	
	$h_{FE(2)}$	$V_{CE} = -5V, I_C = -1.5A$	350	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -2A, I_B = -20mA$	—	-0.5	-1.5	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = -5V, I_C = -0.5A$	—	-0.7	-1.0	V
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0,$ $f = 1MHz$	—	60	—	pF

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