TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

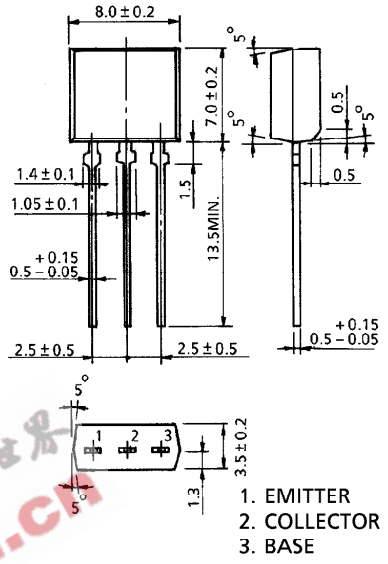
2SA1891

POWER AMPLIFIER APPLICATIONS

POWER SWITCHING APPLICATIONS

- Low Collector Saturation Voltage
  : $V_{CE\ (sat)} = -0.5V$ (Max.) ($I_C = -1A$)
- High Collector Power Dissipation : $P_C = 1.3W$ (Ta = 25°C)
- High Speed Switching Time : $t_{stg} = 300ns$ (Typ.)
- Complementary to 2SC5028

Unit in mm



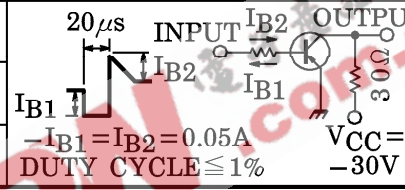
JEDEC	—
EIAJ	—
TOSHIBA	2-8M1A

Weight : 0.55g

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	−60	V
Collector-Emitter Voltage	V_{CEO}	−50	V
Emitter-Base Voltage	V_{EBO}	−6	V
Collector Current	I_C	−2	A
Base Current	I_B	−0.2	A
Collector Power Dissipation	P_C	1.3	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	−55~150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=-60V$, $I_E=0$	—	—	−1.0	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=-6V$, $I_C=0$	—	—	−1.0	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=-10mA$, $I_B=0$	−50	—	—	V
DC Current Gain		$h_{FE(1)}$	$V_{CE}=-2V$, $I_C=-100mA$	120	—	400	
		$h_{FE(2)}$	$V_{CE}=-2V$, $I_C=-1.5A$	40	—	—	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=-1A$, $I_B=-0.05A$	—	—	−0.5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=-1A$, $I_B=-0.05A$	—	—	−1.2	V
Transition Frequency		f_T	$V_{CE}=-2V$, $I_C=-100mA$	—	100	—	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=-10V$, $I_E=0$, f=1MHz	—	23	—	pF
Switching Time	Turn-on Time	t_{on}		—	0.1	—	μs
	Storage Time	t_{stg}		—	0.3	—	
	Fall Time	t_f		—	0.1	—	