

TOSHIBA TRANSISTOR

SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1306B

TOSHIBA (DISCRETE/OPTO)

T-33-19

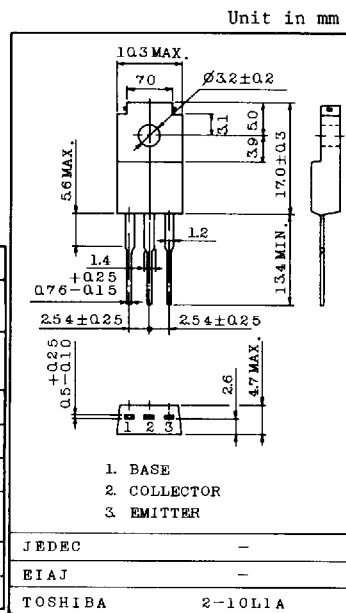
POWER AMPLIFIER APPLICATIONS.
DRIVER STAGE AMPLIFIER APPLICATIONS.

FEATURES:

- High Transition Frequency : $f_T=100\text{MHz}$ (Typ.)
- Complementary to 2SC3298B

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	2SA1306B V_{CB0}	-200	V
Collector-Emitter Voltage	2SA1306B V_{CE0}	-200	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-1.5	A
Base Current	I_B	-0.15	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	20	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-160\text{V}, I_E=0$	-	-	-1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$	-	-	-1.0	μA
Collector-Emitter Breakdown Voltage	2SA1306B $V_{(BR)CEO}$	$I_C=-10\text{mA}, I_B=0$	-200	-	-	V
DC Current Gain	h_{FE} (Note)	$V_{CE}=-5\text{V}, I_C=-100\text{mA}$	70	-	240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$	-	-	-1.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-5\text{V}, I_C=-500\text{mA}$	-	-	-1.0	V
Transition Frequency	f_T	$V_{CE}=-10\text{V}, I_C=-100\text{mA}$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_C=0, f=1\text{MHz}$	-	30	-	pF

Note : h_{FE} Classification O : 70 ~ 140, Y : 120 ~ 240

