

## TOSHIBA TRANSISTOR

**2SC3298B**

SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

T-33-09

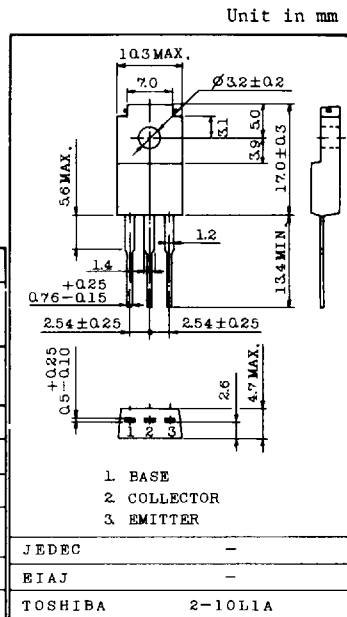
POWER AMPLIFIER APPLICATIONS.  
DRIVER STAGE AMPLIFIER APPLICATIONS.

## FEATURES:

- High Transition Frequency :  $f_T=100\text{MHz}$  (Typ.)
- Complementary to 2SA1306B

## MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	2SC3298B $V_{CB0}$	200	V
Collector-Emitter Voltage	2SC3298B $V_{CE0}$	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	$^\circ\text{C}$



Weight : 2.1g

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	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5\text{V}$ , $I_C=0$	-	-	1.0	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	2SC3298B $V_{(BR)CEO}$	$I_C=10\text{mA}$ , $I_B=0$	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	$C_{ob}$	$V_{CB}=10\text{V}$ , $I_C=0$ , $f=1\text{MHz}$	-	25	-	pF

Note :  $h_{FE}$  Classification 0 : 70~140, Y : 120~240

