

**2SC3298**  
**2SC3298A**  
**2SC3298B**

SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07675 D T-33-09

POWER AMPLIFIER APPLICATIONS.

Unit in mm

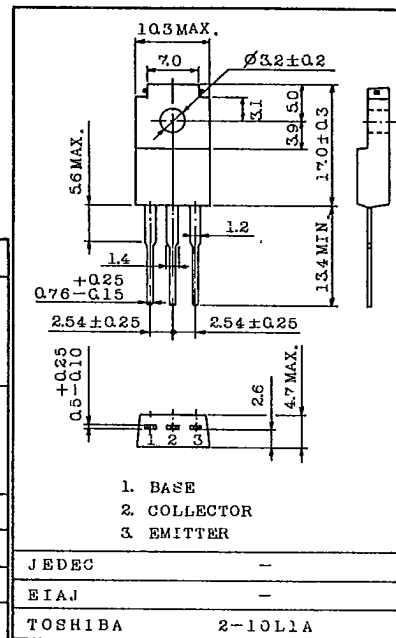
DRIVER STAGE AMPLIFIER APPLICATIONS.

## FEATURES:

- High Transition Frequency :  $f_T=100\text{MHz}$  (Typ.)
- Complementary to 2SA1306, 2SA1306A, 2SA1306B

## MAXIMUM RATINGS

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	2SC3298	V <sub>CB0</sub>	160	V
	2SC3298A		180	
	2SC3298B		200	
Collector-Emitter Voltage	2SC3298	V <sub>CEO</sub>	160	V
	2SC3298A		180	
	2SC3298B		200	
Emitter-Base Voltage		V <sub>EBO</sub>	5	V
Collector Current		I <sub>C</sub>	1.5	A
Base Current		I <sub>B</sub>	0.15	A
Collector Power Dissipation (T <sub>c</sub> =25°C)		P <sub>C</sub>	20	W
Junction Temperature		T <sub>j</sub>	150	°C
Storage Temperature Range		T <sub>stg</sub>	-55 ~ 150	°C

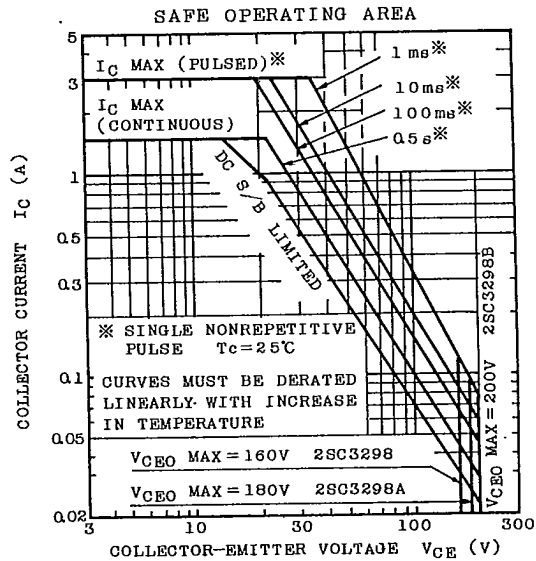
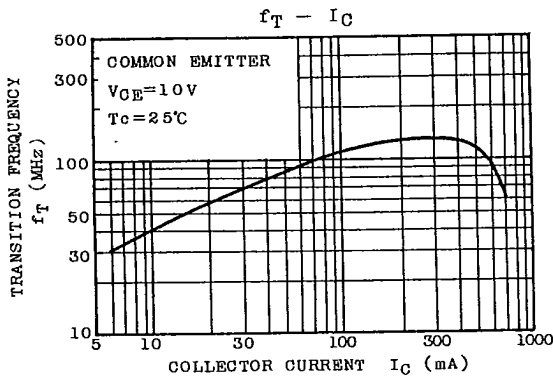
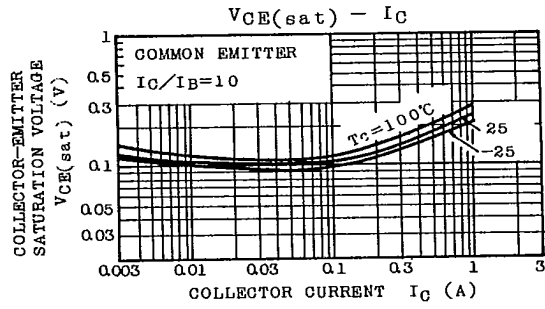
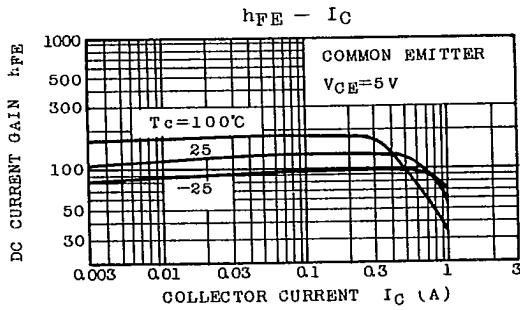
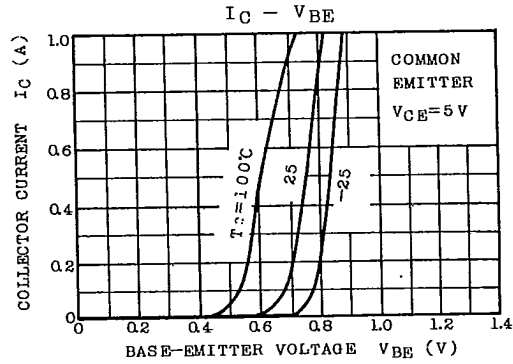
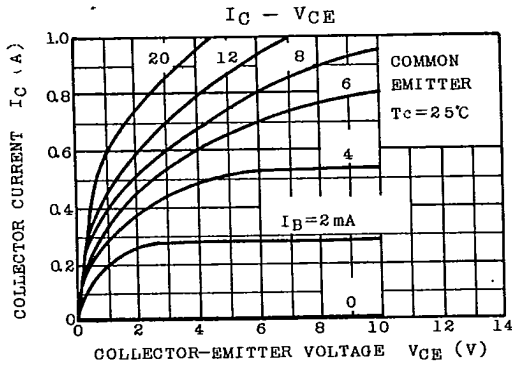
ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I <sub>CB0</sub>	V <sub>CB</sub> =160V, I <sub>E</sub> =0	-	-	1.0	μA
Emitter Cut-off Current		I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0	-	-	1.0	μA
Collector-Emitter Breakdown Voltage	2SC3298	V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	160	-	-	V
	2SC3298A			180	-	-	
	2SC3298B			200	-	-	
DC Current Gain		h <sub>FE</sub> (Note)	V <sub>CE</sub> =5V, I <sub>C</sub> =100mA	70	-	240	
Collector-Emitter Saturation Voltage		V <sub>CE(sat)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA	-	-	1.5	V
Base-Emitter Voltage		V <sub>BE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =500mA	-	-	1.0	V
Transition Frequency		f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =100mA	-	100	-	MHz
Collector Output Capacitance		C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>C</sub> =0, f=1MHz	-	25	-	pF

Note : h<sub>FE</sub> Classification O : 70~140, Y : 120~240.

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