

# 2SC3298

# 2SC3298A

# 2SC3298B

SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

POWER AMPLIFIER APPLICATIONS.

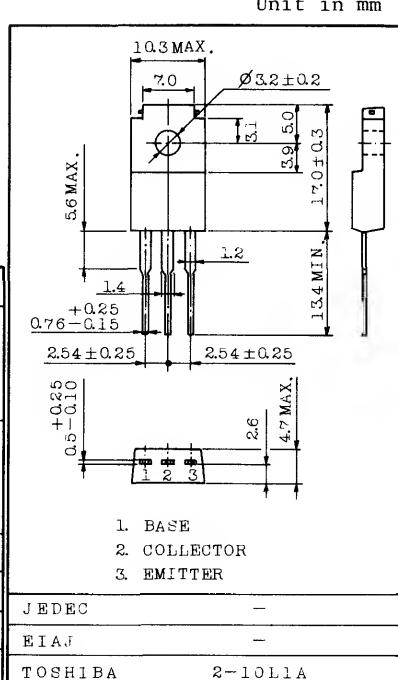
DRIVER STAGE AMPLIFIER APPLICATIONS.

#### 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	$V_{CBO}$	160	V
	2SC3298A		180	
	2SC3298B		200	
Collector-Emitter Voltage	2SC3298	$V_{CEO}$	160	V
	2SC3298A		180	
	2SC3298B		200	
Emitter-Base Voltage	$V_{EBO}$		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	2SC3298	$V_{(BR)CEO}$	$I_C=10\text{mA}$ , $I_B=0$	160	-	-	V
	2SC3298A			180	-	-	
	2SC3298B			200	-	-	
DC Current Gain (Note)	$h_{FE}$	$V_{CE}=5\text{V}$ , $I_C=100\text{mA}$	70	-	240		
Collector-Emitter Saturation Voltage	$V_{CE(\text{sat})}$	$I_C=500\text{mA}$ , $I_B=50\text{mA}$	-	-	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 O : 70 ~ 140, Y : 120 ~ 240

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