

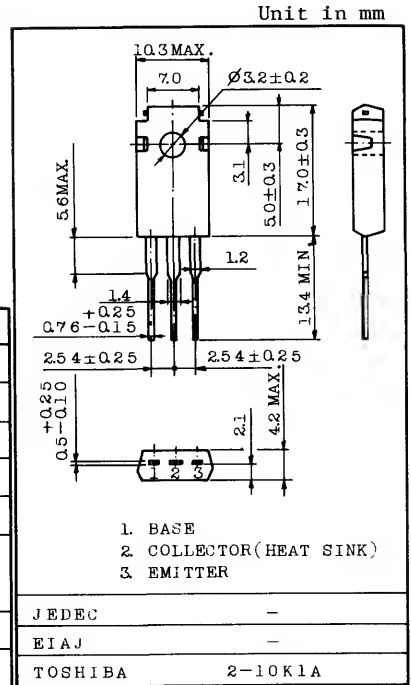
AUDIO FREQUENCY POWER AMPLIFIER APPLICATIONS.

**FEATURES:**

- High DC Current Gain :  $h_{FE}=300(\text{Max.})(V_{CE}=5V, I_C=0.5A)$
- Low Saturation Voltage  
:  $V_{CE(\text{sat})}=1.0V(\text{Max.})(I_C=3A, I_B=0.3A)$
- High Power Dissipation :  $P_C=30W (T_c=25^\circ\text{C})$
- Complementary to 2SB994

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	60	V
Collector-Emitter Voltage	$V_{CEO}$	60	V
Emitter-Base Voltage	$V_{EBO}$	7	V
Collector Current	$I_C$	3	A
Base Current	$I_B$	0.5	A
Collector Power Dissipation	$P_C$	$T_a=25^\circ\text{C}$	1.5
		$T_c=25^\circ\text{C}$	30
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$



Weight : 2.0g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=60V, I_E=0$	-	-	100	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	100	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V(\text{BR})_{CEO}$	$I_C=50\text{mA}, I_B=0$	60	-	-	V
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE}=5V, I_C=0.5A$	60	-	300	
Collector Emitter Saturation Voltage	$V_{CE(\text{sat})}$	$I_C=3A, I_B=0.3A$	-	0.25	1.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=5V, I_C=0.5A$	-	0.7	1.0	V
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=0.5A$	-	3.0	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	70	-	pF
Switching Time	Turn-on Time	$t_{on}$	-	0.8	-	$\mu\text{s}$
	Storage Time	$t_{stg}$	-	1.5	-	
	Fall Time	$t_f$	-	0.8	-	

Note :  $h_{FE}$  Classification 0 : 60 ~ 120, Y : 100 ~ 200, GR : 150 ~ 300

# 2SD1354

