

## POWER AMPLIFIER APPLICATIONS.

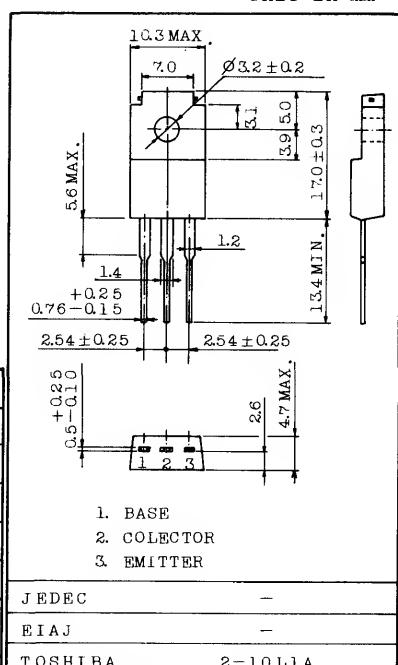
CAR RADIO, CAR STEREO OUTPUT STAGE AMPLIFIER  
APPLICATIONS.

## FEATURES:

- Good Linearity of  $f_{FE}$
- Complementary to 2SA1305 and 5W Output Applications.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	30	V
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	3	A
Base Current	$I_B$	0.3	A
Collector Power Dissipation ( $T_c=25^\circ C$ )	$P_C$	15	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=20V$ , $I_E=0$	-	-	1.0	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V$ , $I_C=0$	-	-	1.0	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA$ , $I_B=0$	30	-	-	V
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=2V$ , $I_C=0.5A$	70	-	240	
	$h_{FE}(2)$	$V_{CE}=2V$ , $I_C=2.5A$	25	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2A$ , $I_B=0.2A$	-	0.3	0.8	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=2V$ , $I_C=0.5A$	-	0.75	1.0	V
Transition Frequency	$f_T$	$V_{CE}=2V$ , $I_C=0.5A$	-	100	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V$ , $I_E=0$ , $f=1MHz$	-	35	-	pF

Note :  $h_{FE}(1)$  Classification O : 70~140, Y : 120~240

