

AUDIO FREQUENCY LOW POWER AMPLIFIER APPLICATIONS.

DRIVER STAGE AMPLIFIER APPLICATIONS.

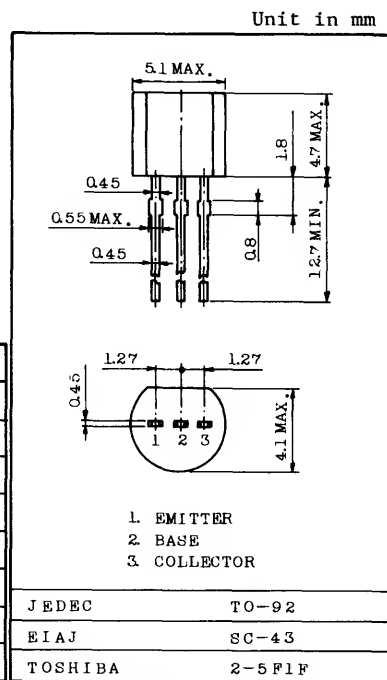
SWITCHING APPLICATIONS.

FEATURES:

- Excellent h_{FE} Linearity
: $h_{FE}(2)=23(\text{Min.})$ at $V_{CE}=1V$, $I_C=400mA$
- 1 Watt Amplifier Applications
- Complementary to TEC8012

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Base Current	I_B	100	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ C$



Weight : 0.21g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=35V$, $I_E=0$	-	-	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V$, $I_C=0$	-	-	0.1	μA
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=1V$, $I_C=50mA$	64	-	202	
	$h_{FE}(2)$	$V_{CE}=1V$, $I_C=400mA$	23	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA$, $I_B=50mA$	-	0.1	0.25	V
Base-Emitter Voltage	V_{BE}	$I_C=50mA$, $V_{CE}=1V$	0.65	0.73	0.80	V
Transition Frequency	f_T	$V_{CE}=6V$, $I_C=20mA$	140	300	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=6V$, $I_E=0$, $f=1MHz$	-	7	-	pF
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA$, $I_B=0$	30	-	-	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA$, $I_B=50mA$	-	-	1.2	V

Note : $h_{FE}(1)$ Classification D : 64 ~ 91, E : 78 ~ 112, F : 96 ~ 135,
G : 118 ~ 166, H : 144 ~ 202

