

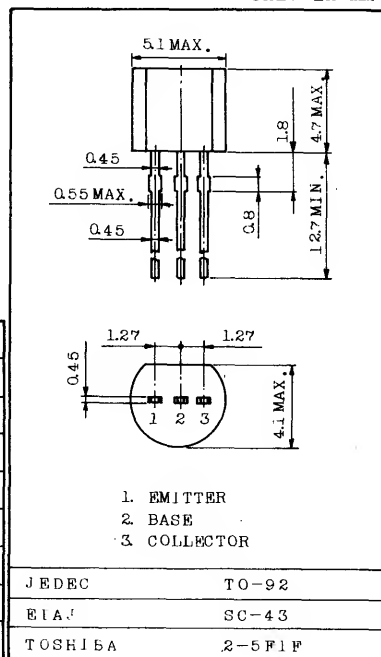
DRIVER STAGE AMPLIFIER APPLICATIONS.
SWITCHING APPLICATIONS.

FEATURES:

- Excellent h_{FE} Linearity
: $h_{FE}(2)=23(\text{Min.})$ at $V_{CE}=-1\text{V}$, $I_C=-400\text{mA}$
- 1 Watt Amplifier Application
- Complementary to TEC8013

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

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	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

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

Weight : 0.21g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-35\text{V}$, $I_E=0$	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$	-	-	-0.1	μA
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=-1\text{V}$, $I_C=-50\text{mA}$	64	-	202	-
	$h_{FE}(2)$	$V_{CE}=-1\text{V}$, $I_C=-400\text{mA}$	23	-	-	
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C=-100\text{mA}$, $I_B=-50\text{mA}$	-	-0.1	-0.25	V
Base-Emitter Voltage	V_{BE}	$I_C=-50\text{mA}$, $V_{CE}=-1\text{V}$	-0.65	-0.72	-0.80	V
Transition Frequency	f_T	$V_{CE}=-6\text{V}$, $I_C=-20\text{mA}$	150	200	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-6\text{V}$, $I_E=0$, $f=1\text{MHz}$	-	7	-	pF
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}$, $I_B=0$	-30	-	-	V
Base-Emitter Saturation Voltage	$V_{BE}(\text{sat})$	$I_C=-100\text{mA}$, $I_B=-50\text{mA}$	-	-	-1.2	V

Note: $h_{FE}(1)$ Classification D : 64 ~ 91, E : 73 ~ 112, F : 96 ~ 135, G : 118 ~ 166,
H : 144 ~ 202

