

2SD845

SILICON NPN TRIPLE DIFFUSED TYPE

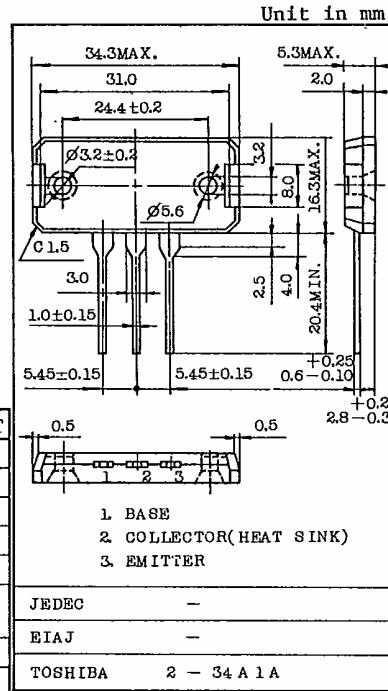
POWER AMPLIFIER APPLICATION,

FEATURES:

- High Breakdown Voltage : $V_{CEO}=150V$ (Min.)
- High Transition Frequency : $f_T=20MHz$ (Typ.)
- Complementary to 2SB755.
- Recommended for 80% High-Fidelity Audio Frequency Amplifier Output Stage.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	150	V
Collector-Emitter Voltage	V_{CEO}	150	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	12	A
Emitter Current	I_E	-12	A
Collector Power Dissipation ($T_c=25^\circ C$)	P_C	120	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}	$V_{CB}=150V, I_E=0$	-	-	50	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	50	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=0.1A, I_B=0$	150	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10mA, I_C=0$	5	-	-	V
DC Current Gain	h_{FE} (Note)	$V_{CE}=5V, I_C=1A$	55	-	160	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=5A, I_B=0.5A$	-	-	2.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5V, I_C=5A$	-	-	1.5	V
Transition Frequency	f_T	$V_{CE}=10V, I_C=1A$	-	20	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	200	-	pF

Note : h_{FE} Classification R : 55~110, O : 80~160

TOSHIBA CORPORATION

