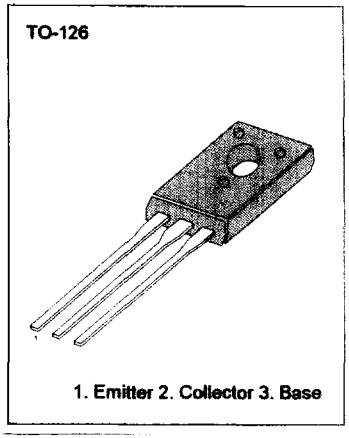
PNP EPITAXIAL SILICON DARLINGTON TRANSISTOR

AUDIO FREQUENCY POWER AMPLIFIER
LOW SPEED SWITCHING
INDUSTRIAL USE



ABSOLUTE MAXIMUM RATINGS

Characteristic		Symbol	Rating	Unit
Collector- Base Voltage	: KSB794	V_{CBO}	- 60	V
	:KSB795	V_{CBO}	- 80	V
Collector- Emitter Voltage	:KSB794	V_{CEO}	- 60	V
	: KSB795	V_{CEO}	- 80	V
Emitter- Base Voltage		V_{EBO}	- 8	V
Collector Current (DC)		I_C	- 1.5	A
* Collector Current (Pulse)		I_C	- 3	A
Base Current (DC)		I_B	- 0.15	A
Collector Dissipation (T_A=25℃)		P_C	1	W
Collector Dissipation (T_C=25℃)		P_C	10	W
Junction Temperature		TJ	150	℃
Storage Temperature		T_{STG}	- 55 ~ 150	℃

* PW≤300uS Duty Cycle≤10%

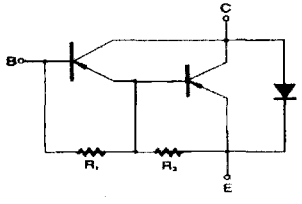
ELECTRICAL CHARACTERISTICS (T_C=25℃)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = - 60V, I_E = 0		- 10	uA
Collector Cutoff Current	I_{CER}	V_{CE} = - 60V, R_{BE} = 51Ω, T_A = 125℃		- 1	mA
Collector Cutoff Current	I_{CEX1}	V_{CE} = - 60V, V_{BE} (off) = 1.5V		- 10	uA
Collector Cutoff Current	I_{CEX2}	V_{CE} = - 60V, V_{BE} (off) = 1.5V		- 1	mA
		T_A = 125℃		- 1	mA
Emitter Cutoff Current	I_{EBO}	V_{EB} = - 5V, I_C = 0			
*DC Current Gain	h_{FE1}	V_{CE} = - 2V, I_C = - 0.5A	1000		
	h_{FE2}	V_{CE} = - 2V, I_C = - 1A	2000	30000	
*Collector- Emitter Saturation Voltage	V_{CE}(sat)	I_C = - 1A, I_B = - 1mA		- 1.5	V
*Base Emitter Saturation Voltage	V_{BE}(sat)	I_C = - 1A, I_B = - 1mA		- 2	V

* Pulse Test : PW≤350uS, Duty Cycle≤2% Pulsed.

h_{FE}(2) CLASSIFICNTION

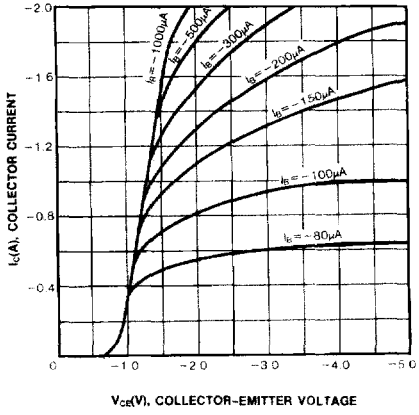
Classification	R	O	Y
h_{FE}(2)	2000-5000	4000-10000	8000-30000



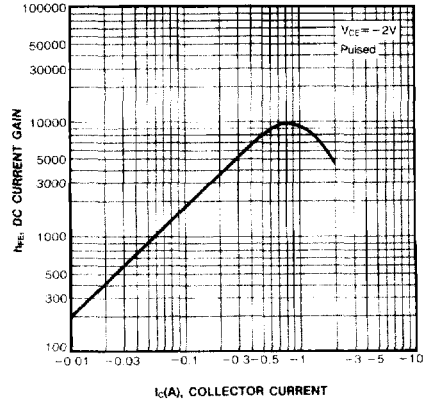
R1≒10 kΩ
R2≒500Ω

SAMSUNG ELECTRONICS

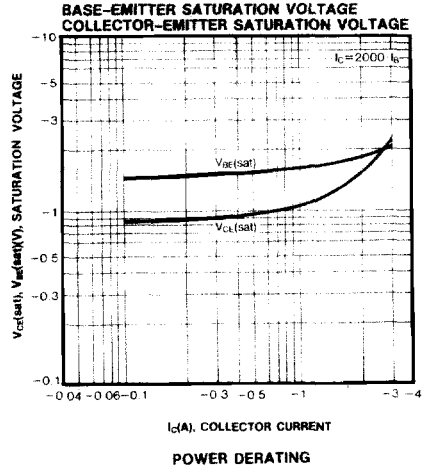
STATIC CHARACTERISTIC



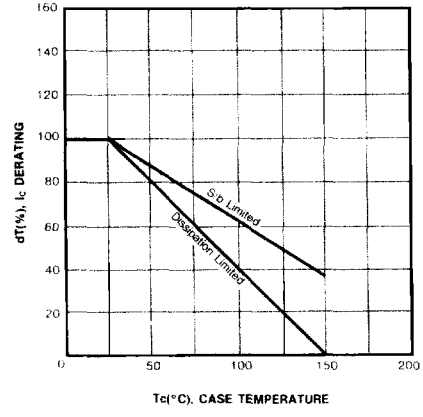
DC CURRENT GAIN



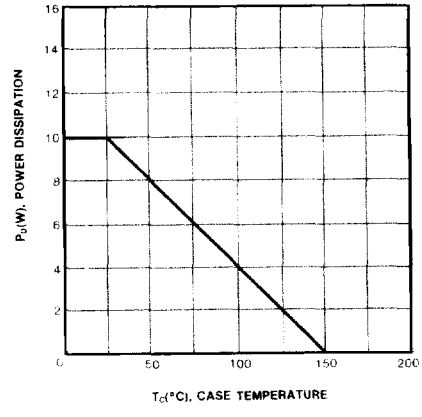
BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



DERATING CURVE OF SAFE OPERATING AREAS



POWER DERATING



SAFE OPERATING AREA