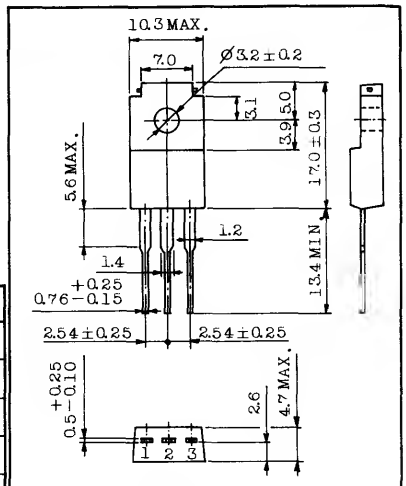
SILICON PNP TRIPLE DIFFUSED TYPE

2SB1015

AUDIO FREQUENCY POWER AMPLIFIER APPLICATIONS.

FEATURES:
- Low Collector Saturation Voltage
  : $V_{CE(sat)}$=-1.0V(Max.) at I_C=-3A, I_B=-0.3A
- Collector Power Dissipation : P_C=25W (T_c=25°C)
- Complementary to 2SD1406

Unit in mm



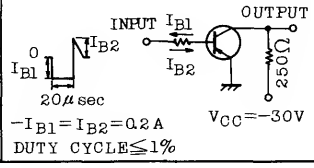
JEDEC	—
EIAJ	—
TOSHIBA	2-10L1A

Weight : 2.1g

MAXIMUM RATINGS (Ta=25°C)

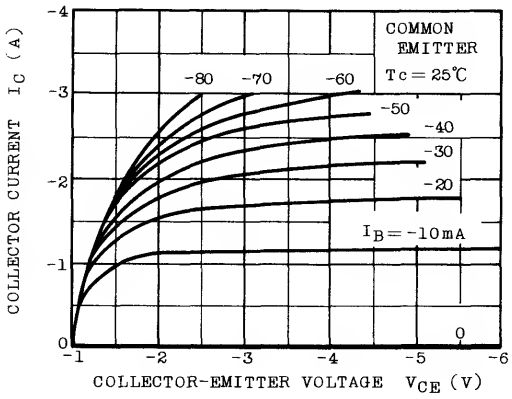
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-60	V
Collector-Emitter Voltage		V_{CEO}	-60	V
Emitter-Base Voltage		V_{EBO}	-7	V
Collector Current		I_C	-3	A
Base Current		I_B	-0.5	A
Collector Power Dissipation	Ta=25°C	P_C	2.0	W
	Tc=25°C		25	
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55~150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

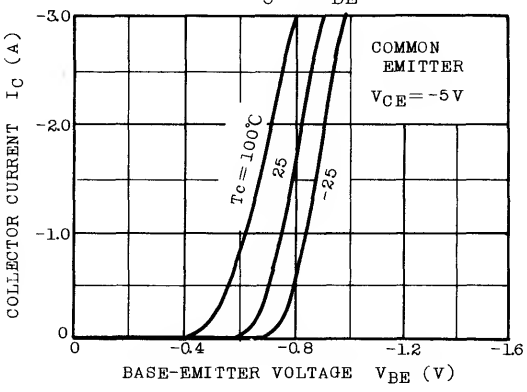
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=-60V, I_E=0	-	-	-100	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-7V, I_C=0	-	-	-100	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	I_C=-50mA, I_B=0	-60	-	-	V
DC Current Gain		$h_{FE(1)}$ (Note)	V_{CE}=-5V, I_C=-0.5A	60	-	200	
		$h_{FE(2)}$	V_{CE}=-5V, I_C=-3A	20	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=-3A, I_B=-0.3A	-	-0.5	-1.0	V
Base-Emitter Voltage		V_{BE}	V_{CE}=-5A, I_C=-0.5A	-	-0.7	-1.0	V
Transition Frequency		f_T	V_{CE}=-5V, I_C=-0.5A	-	9	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	150	-	pF
Switching Time	Turn-on Time	t_{on}		-	0.4	-	μs
	Storage Time	t_{stg}		-	1.7	-	
	Fall Time	t_f		-	0.5	-	

Note : $h_{FE(1)}$ Classification O : 60~120, Y : 100~200

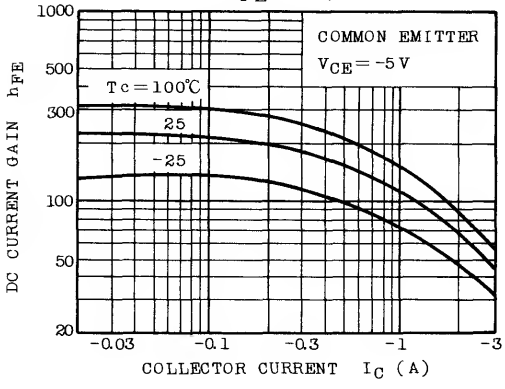
$I_C - V_{CE}$



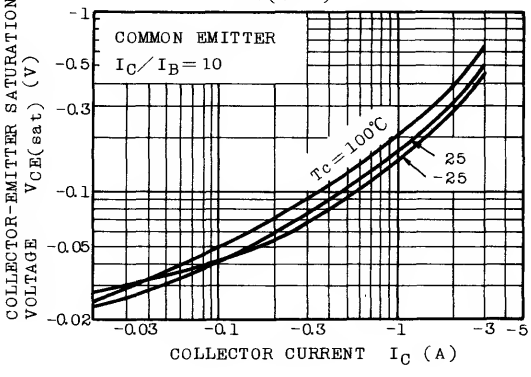
$I_C - V_{BE}$



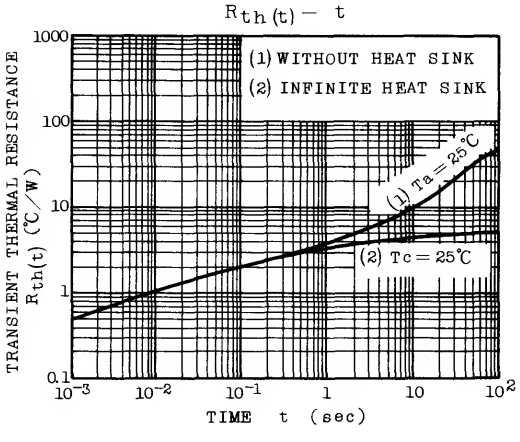
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$R_{th(t)} - t$



SAFE OPERATING AREA