

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07646 DT-33-11

SILICON NPN TRIPLE DIFFUSED TYPE

**2SC3180**

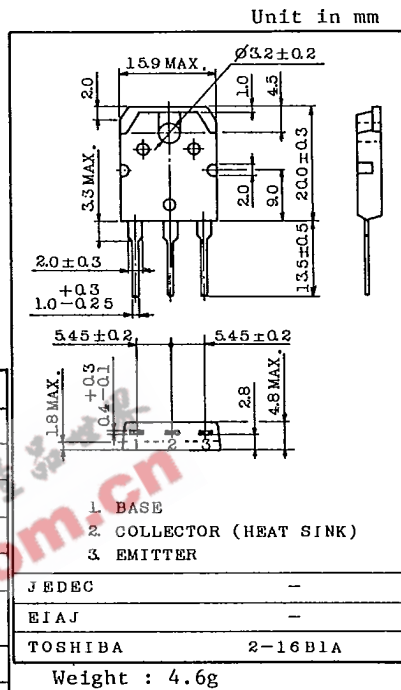
POWER AMPLIFIER APPLICATIONS.

## FEATURES:

- Complementary to 2SA1263
- Recommend for 40W High Fidelity Audio Frequency Amplifier Output Stage.

## MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	80	V
Collector-Emitter Voltage	V <sub>CEO</sub>	80	V
Emitter-Base Voltage	V <sub>EB0</sub>	5	V
Collector Current	I <sub>C</sub>	6	A
Base Current	I <sub>B</sub>	0.6	A
Collector Power Dissipation (Tc=25°C)	P <sub>C</sub>	60	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C



## ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CB0</sub>	V <sub>CB</sub> =80V, I <sub>E</sub> =0	-	-	5.0	μA
Emitter Cut-off Current	I <sub>EB0</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0	-	-	5.0	μA
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =50mA, I <sub>B</sub> =0	80	-	-	V
DC Current Gain	h <sub>FE</sub> (1) (Note)	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	55	-	160	
	h <sub>FE</sub> (2)	V <sub>CE</sub> =5V, I <sub>C</sub> =3A	35	75	-	
Collector Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =5A, I <sub>B</sub> =0.5A	-	0.45	2.0	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =3A	-	0.92	1.5	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	-	30	-	MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz	-	105	-	pF

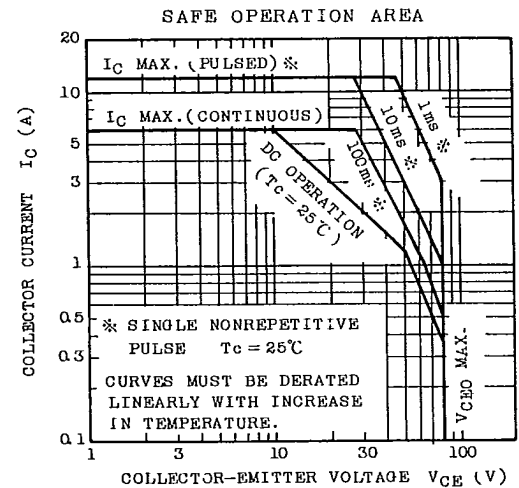
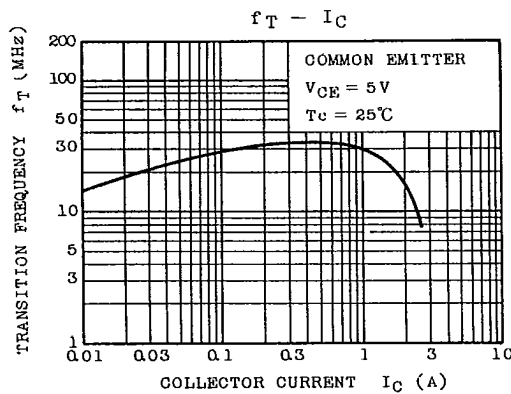
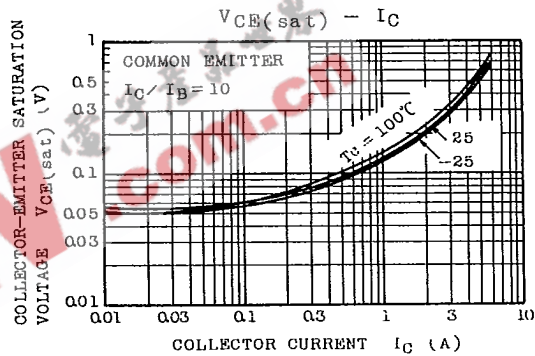
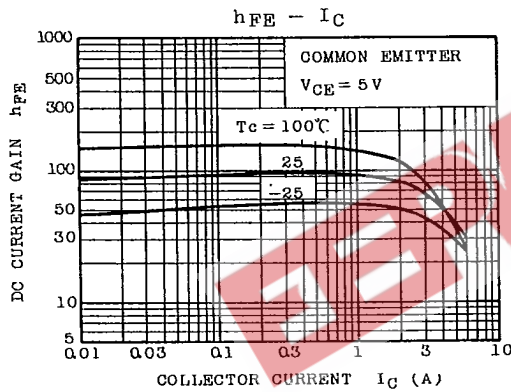
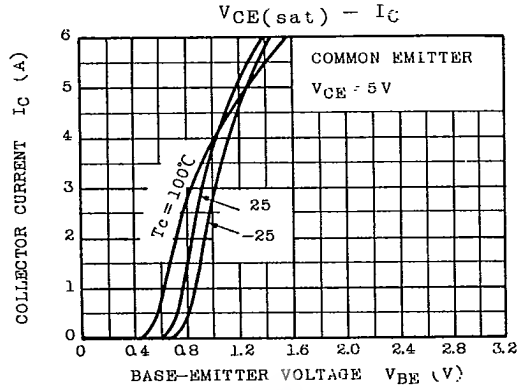
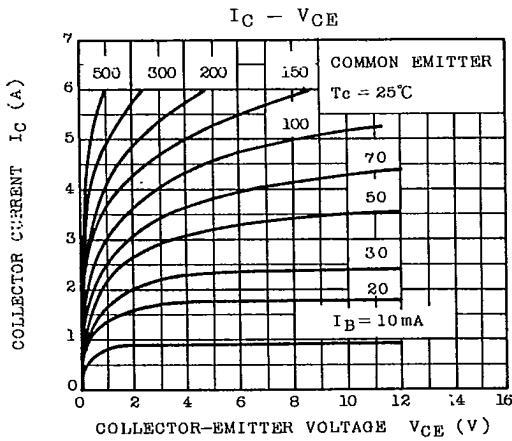
Note : h<sub>FE</sub>(1) Classification, R : 55 ~ 110 O : 80 ~ 160

TOSHIBA CORPORATION

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