

TOSHIBA**2SC4944**

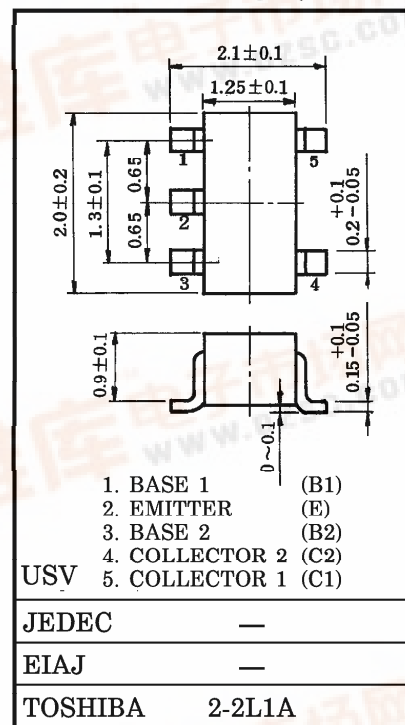
TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC4944

Unit in mm

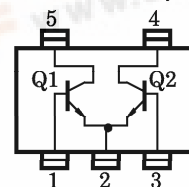
AUDIO FREQUENCY GENERAL PURPOSE AMPLIFIER APPLICATIONS.

- Small Package (Dual Type)
- High Voltage and High Current
: $V_{CEO}=50V$, $I_C=150mA$ (Max.)
- High h_{FE} : $h_{FE}=120\sim400$
- Excellent h_{FE} Linearity
: $h_{FE}(I_C=0.1mA)/h_{FE}(I_C=2mA)=0.95$ (Typ.)
- Complementary to 2SA1873



Weight : 6.2mg

EQUIVALENT CIRCUIT (TOP VIEW)

MAXIMUM RATINGS ($T_a=25^\circ C$) (Q1, Q2 COMMON)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Base Current	I_B	30	mA
Collector Power Dissipation	P_C *	200	mW
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature Range	T_{stg}	$-55\sim125$	$^\circ C$

* Total Rating

ELECTRICAL CHARACTERISTIC ($T_a=25^\circ C$) (Q1, Q2 COMMON)

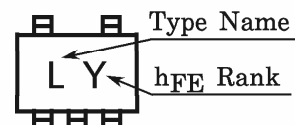
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-Off Current	I_{CBO}	$V_{CB}=60V$, $I_E=0$	—	—	0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5V$, $I_C=0$	—	—	0.1	μA
DC Current Gain	h_{FE} (Note)	$V_{CE}=6V$, $I_C=2mA$	120	—	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA$, $I_B=10mA$	—	0.1	0.25	V
Transition Frequency	f_T	$V_{CE}=10V$, $I_C=1mA$	80	—	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=1MHz$	—	2	3.5	pF

Note : h_{FE} Classification

Y (Y) : 120~240, GR (G) : 200~400

() Marking Symbol

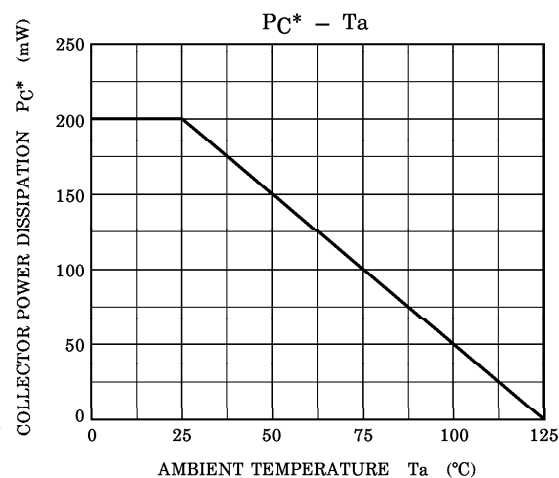
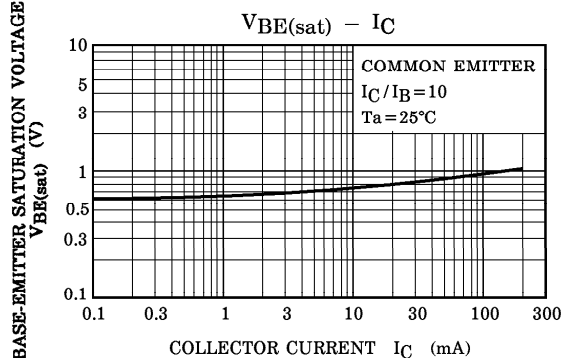
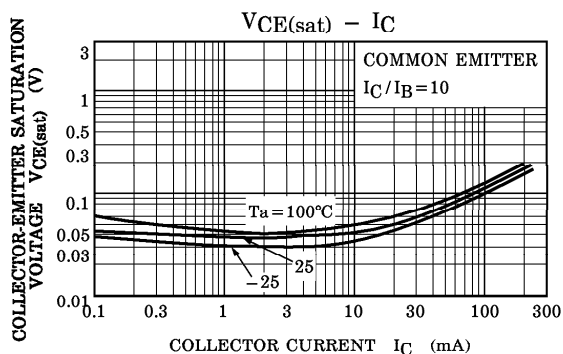
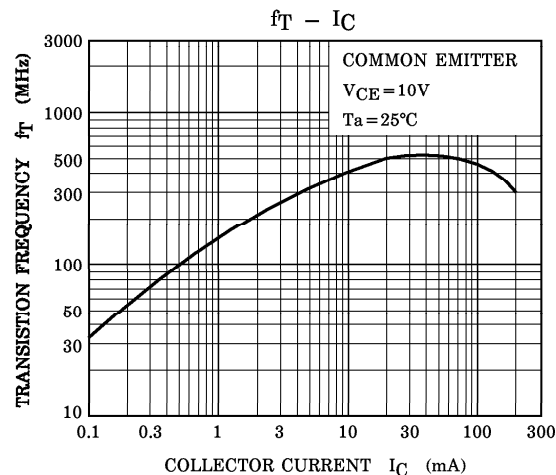
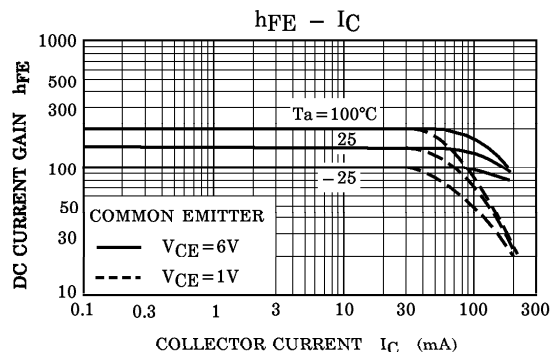
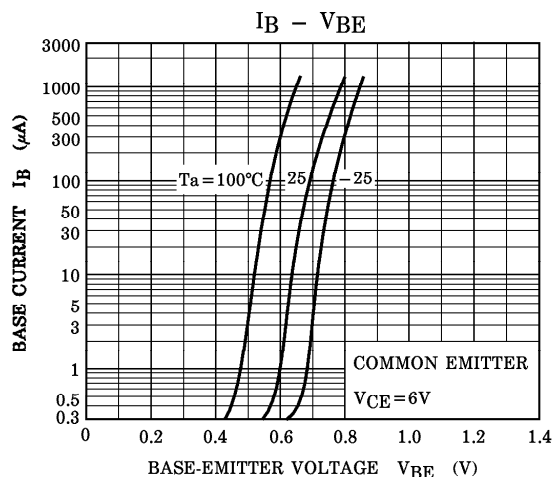
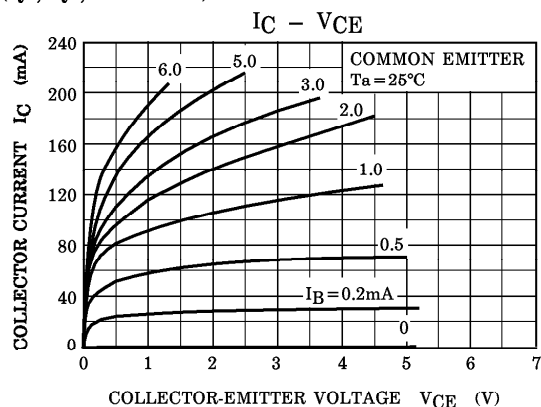
MARKING



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TOSHIBA is continually working to improve the quality and the reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to observe standards of safety, and to avoid situations in which a malfunction or failure of a TOSHIBA product could cause loss of human life, bodily injury or damage to property. In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.

(Q1, Q2, COMMON)



* Total Rating

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