

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

2SC2230, 2SC2230A

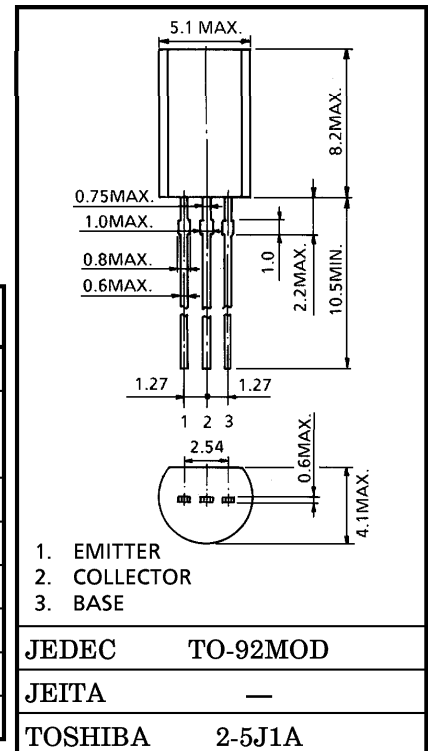
HIGH VOLTAGE GENERAL AMPLIFIER APPLICATIONS

COLOR TV CLASS B SOUND OUTPUT APPLICATIONS

- High Voltage : $V_{CE0}=180V$ (2SC2230A)
- High DC Current Gain.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	200	V
Collector-Emitter Voltage	2SC2230	160	V
	2SC2230A	180	
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Base Current	I_B	50	mA
Collector Power Dissipation	P_C	800	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

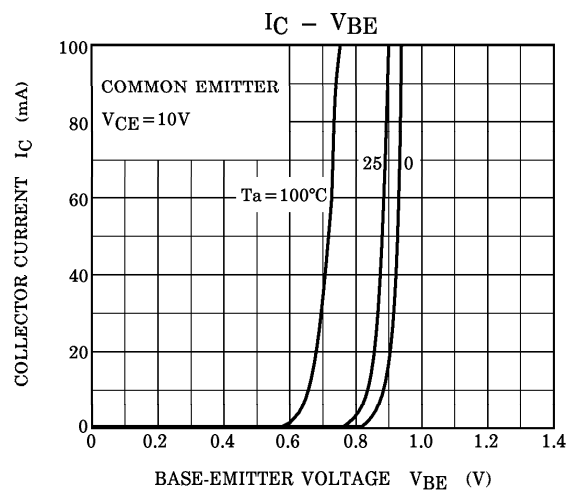
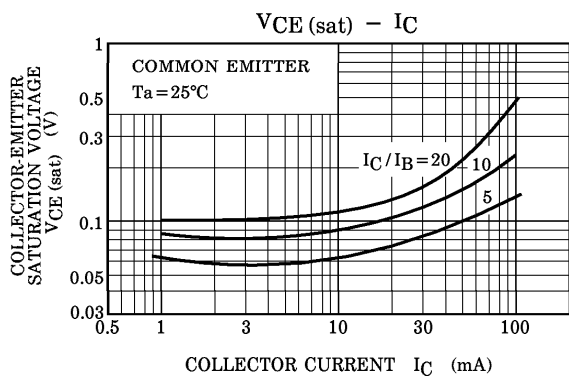
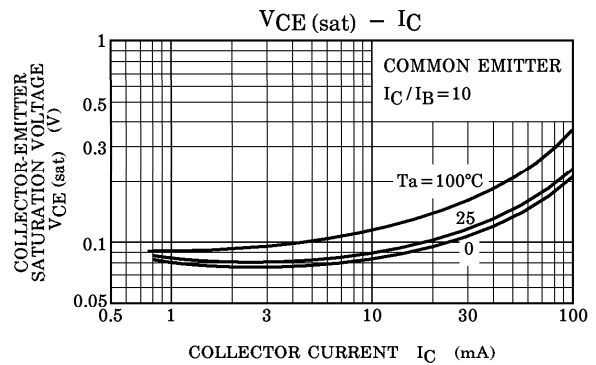
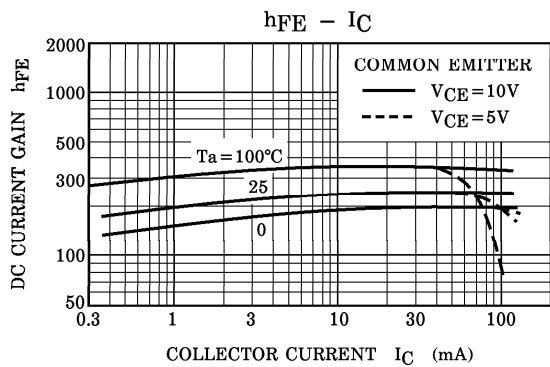
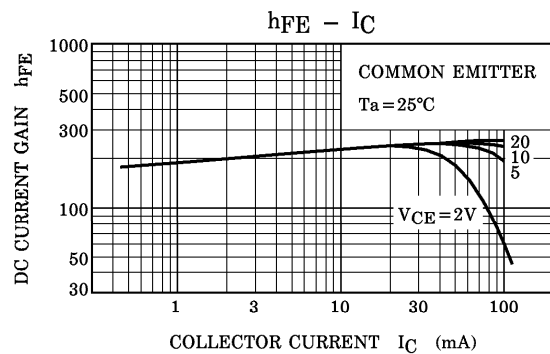
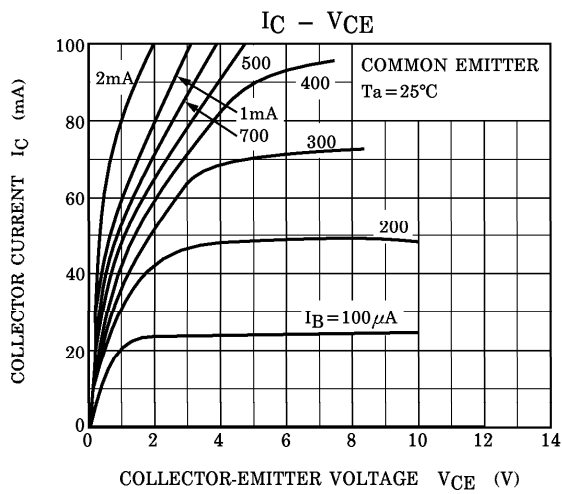


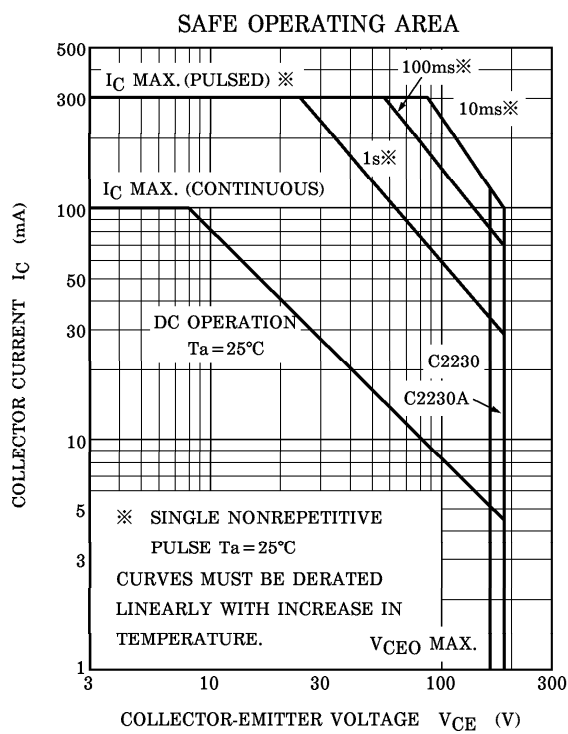
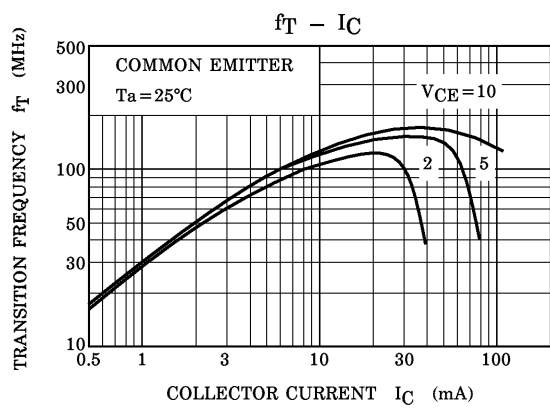
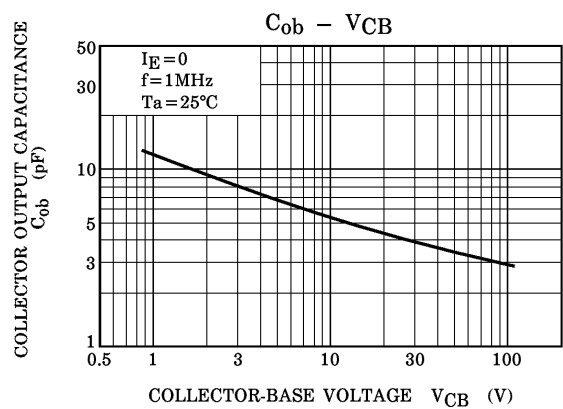
Weight : 0.36g (Typ.)

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=200V, I_E=0$	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	—	—	0.1	μA
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=10V, I_C=10mA$	120	—	400	
	$h_{FE}(2)$	$V_{CE}=10V, I_C=50mA$	80	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$	—	—	0.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=10V, I_C=1mA$	0.50	0.60	0.70	V
Transition Frequency	f_T	$V_{CE}=10V, I_C=10mA$	50	—	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	—	—	7.0	pF

(Note) : $h_{FE}(1)$ Classification Y : 120~240, GR : 200~400





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