

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07505

D T-33-07

# 2SC2231

# 2SC2231A

SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

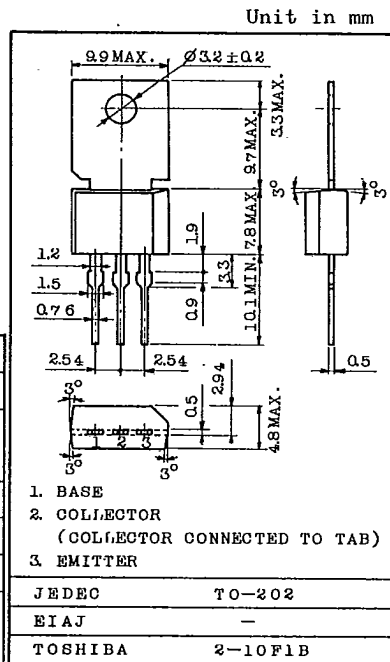
HIGH VOLTAGE GENERAL AMPLIFIER APPLICATIONS.  
COLOR TV CLASS B SOUND OUTPUT APPLICATIONS.

## FEATURES:

- High Voltage :  $V_{CE0}=180V$  (2SC2231A)

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	200	V
Collector-Emitter Voltage	$V_{CEO}$	160	V
		180	
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	200	mA
Base Current	$I_B$	100	mA
Collector Power Dissipation	$P_C$	$T_a=25^\circ C$	1.5
		$T_c=25^\circ C$	12
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$



Weight : 1.4g

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	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	0.1	$\mu A$
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=10V, I_C=50mA$	100	-	320	-
	$h_{FE(2)}$	$V_{CE}=10V, I_C=150mA$	80	-	-	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=200mA, I_B=20mA$	-	-	1.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=10V, I_C=5mA$	0.55	0.65	0.75	V
Transition Frequency	$f_T$	$V_{CE}=10V, I_C=50mA$	50	-	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	-	10	pF

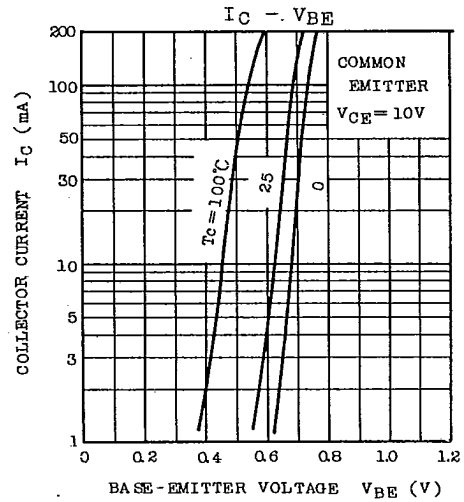
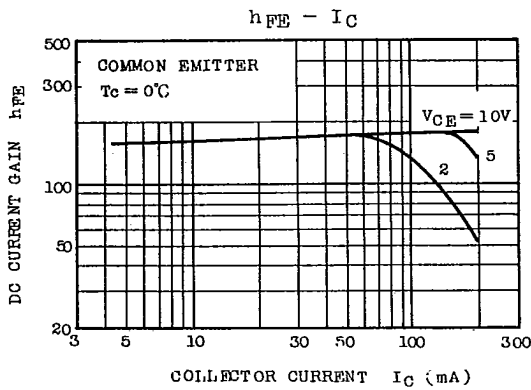
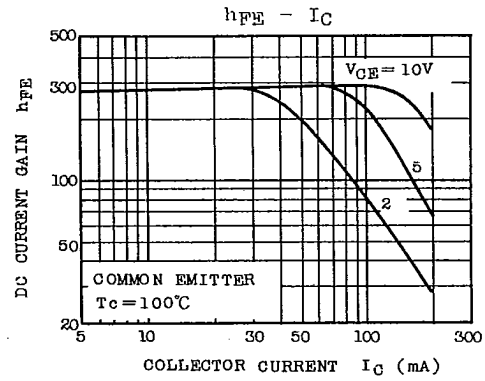
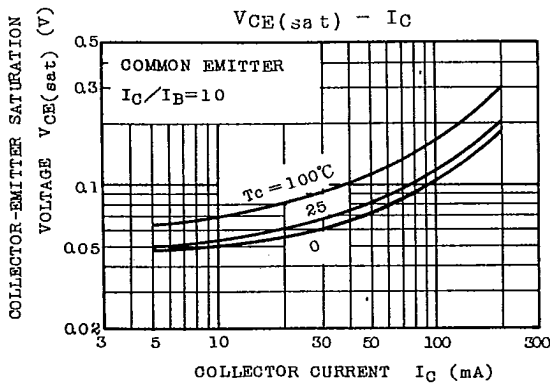
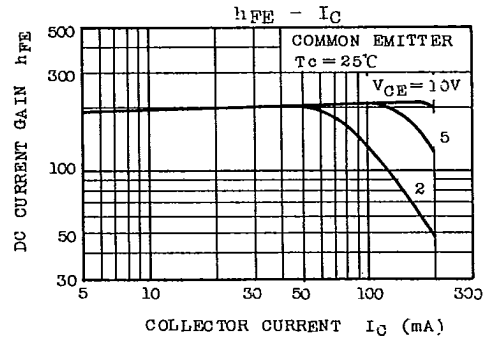
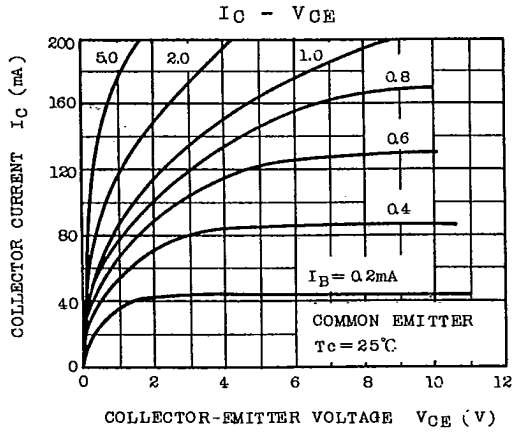
Note :  $h_{FE(1)}$  Classification O:100~200, Y:160~320

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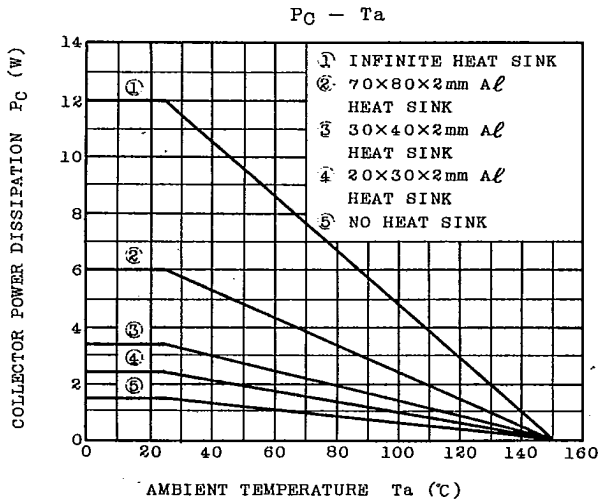
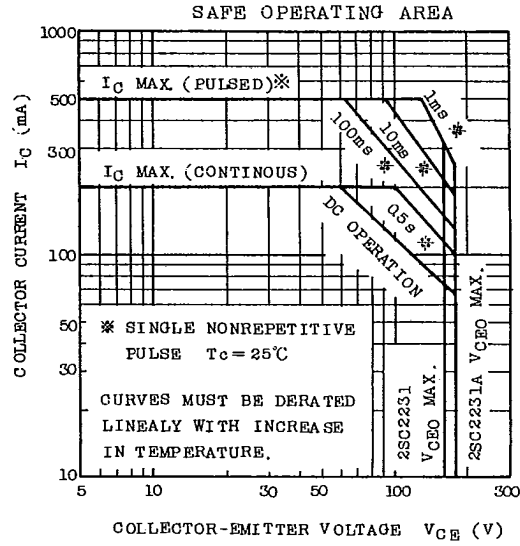
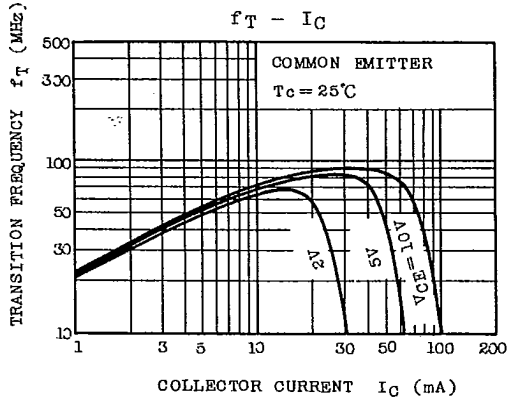


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