

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

# 2SC2229

BLACK AND WHITE TV VIDEO OUTPUT APPLICATIONS.

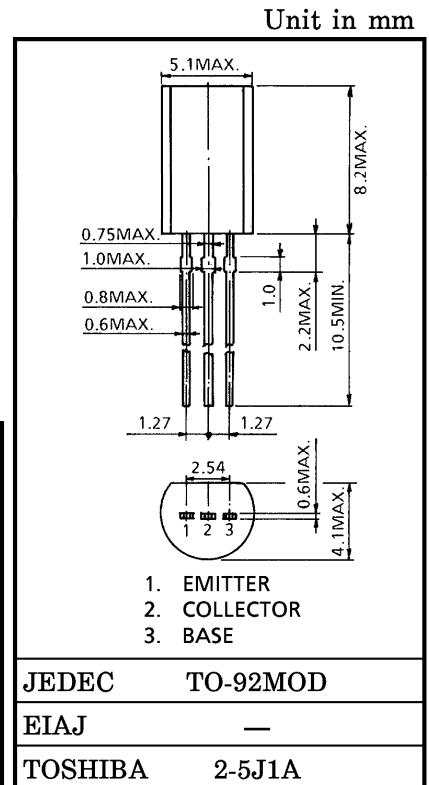
HIGH VOLTAGE SWITCHING APPLICATIONS.

DRIVER STAGE AUDIO AMPLIFIER APPLICATIONS.

- High Breakdown Voltage :  $V_{CE0} = 150V$  (Min.)
- Low Output Capacitance :  $C_{ob} = 5.0pF$  (Max.)
- High Transition Frequency :  $f_T = 120MHz$  (Typ.)

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	200	V
Collector-Emitter Voltage	$V_{CEO}$	150	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	50	mA
Base Current	$I_B$	20	mA
Collector Power Dissipation	$P_C$	800	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{slg}$	-55~150	$^\circ C$

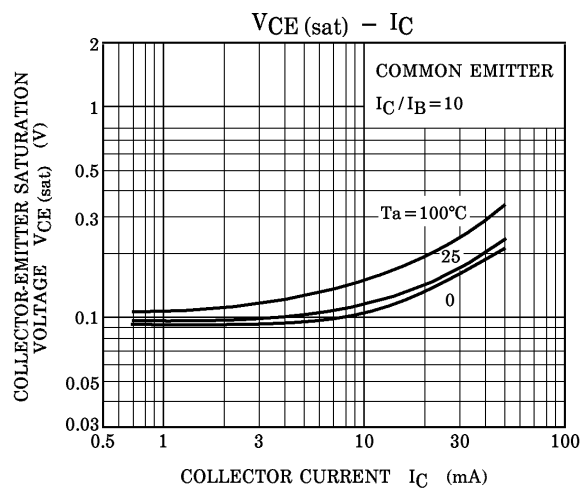
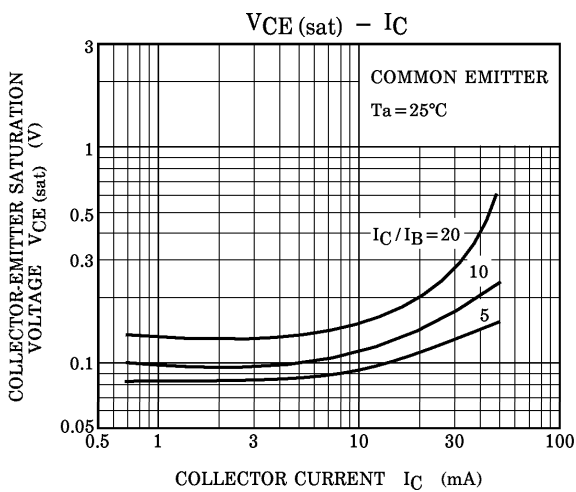
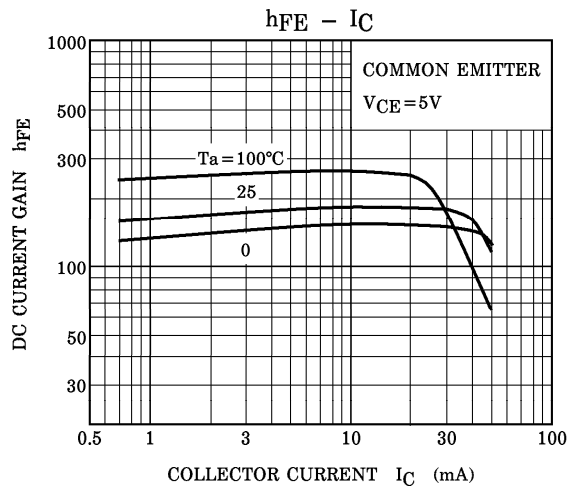
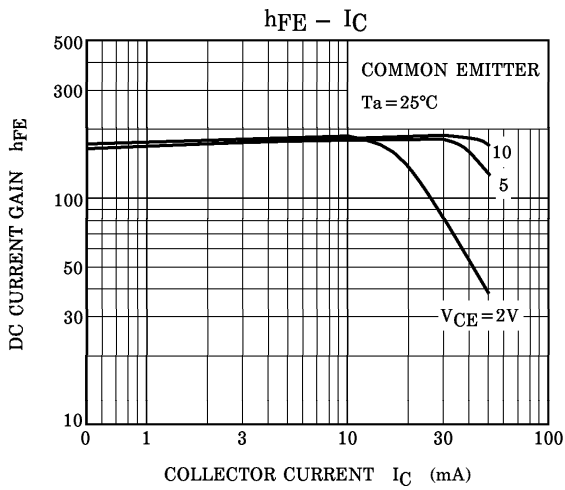
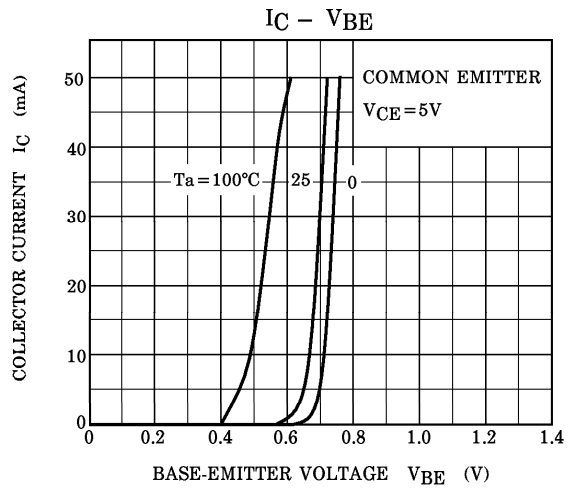
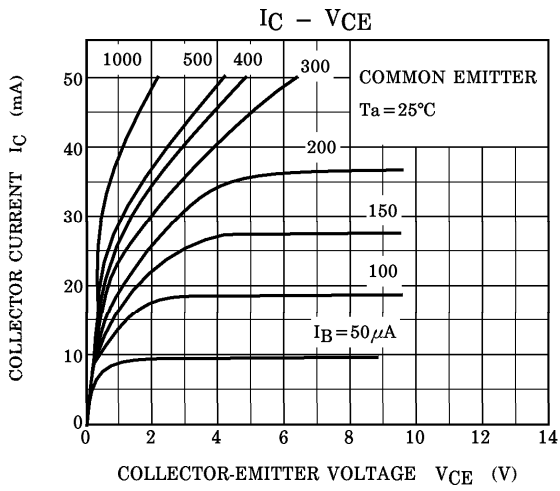


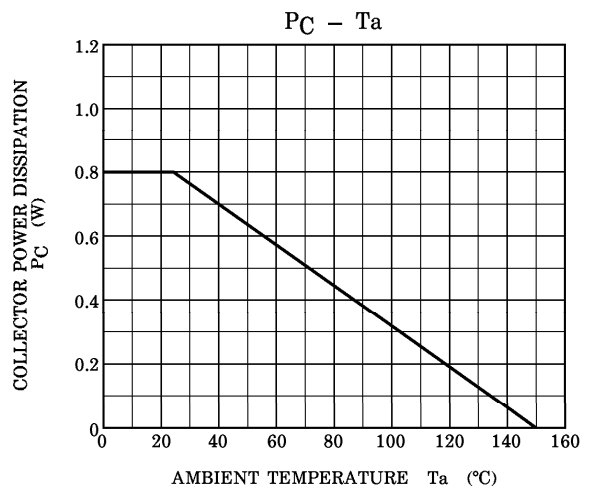
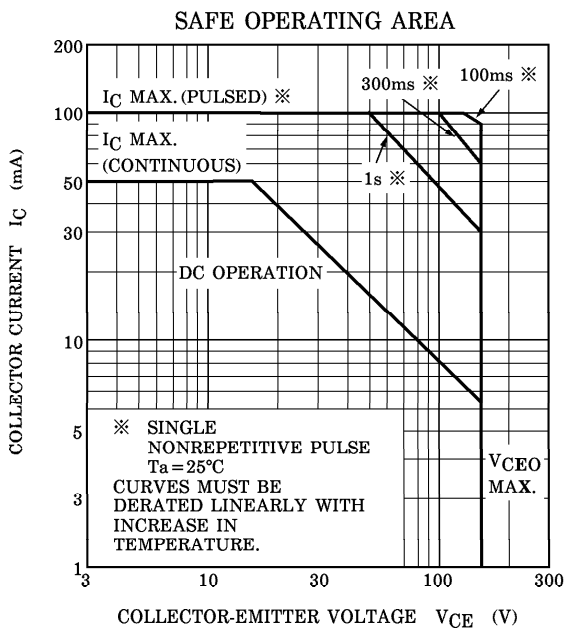
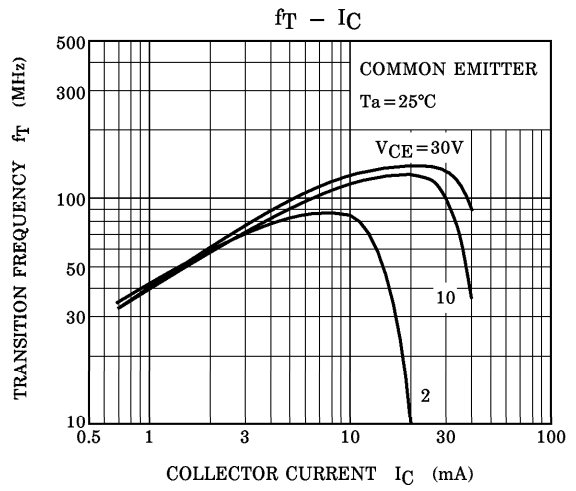
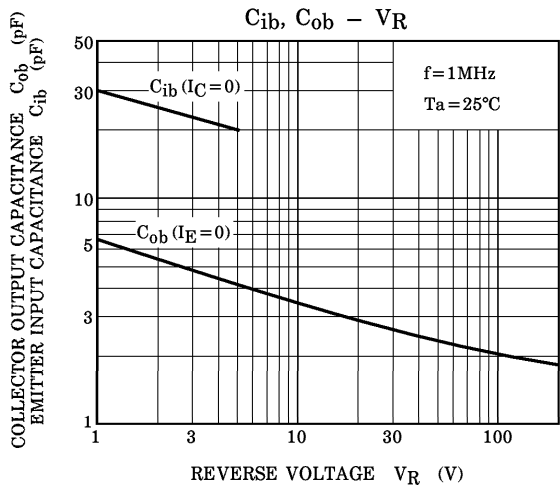
Weight : 0.36g

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	$h_{FE}$ (Note)	$V_{CE} = 5V, I_C = 10mA$	70	—	240	
Collector-Emitter Saturation Voltage	$V_{CE}$ (sat)	$I_C = 10mA, I_B = 1mA$	—	—	0.5	V
Base-Emitter Saturation Voltage	$V_{BE}$ (sat)	$I_C = 10mA, I_B = 1mA$	—	—	1	V
Transition Frequency	$f_T$	$V_{CE} = 30V, I_C = 10mA$	—	120	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10V, I_E = 0, f = 1MHz$	—	3.5	5	pF

Note :  $h_{FE}$  Classification    O : 70~140,    Y : 120~240





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