

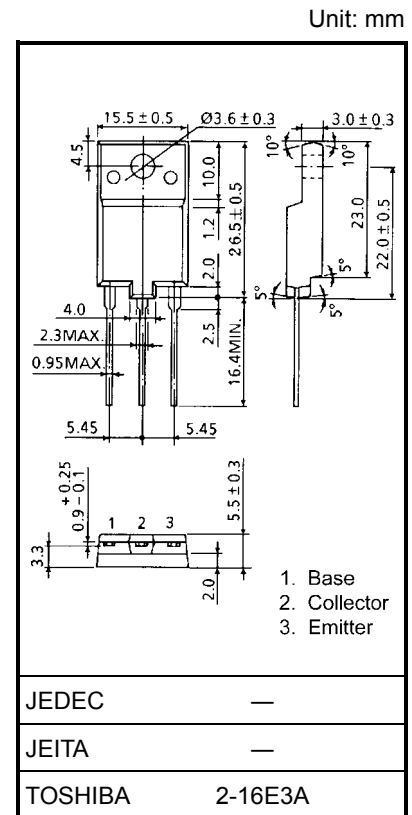
# 2SD2551

## HORIZONTAL DEFLECTION OUTPUT FOR COLOR TV

- High Voltage :  $V_{CBO} = 1700 \text{ V}$
- Low Saturation Voltage :  $V_{CE(sat)} = 5.0 \text{ V (Max.)}$
- High Speed :  $t_f = 1.0 \mu\text{s (Max.)}$
- Built-in Damper Type
- Collector Metal (Fin) is Fully Covered with Mold Resin.

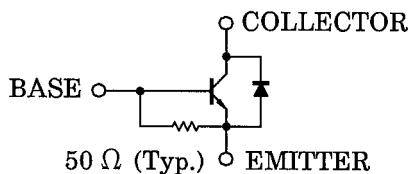
## MAXIMUM RATINGS ( $T_c = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	1700	V
Collector-Emitter Voltage	$V_{CEO}$	600	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	DC	$I_C$	A
	Pulse	$I_{CP}$	
Base Current	$I_B$	2.5	A
Collector Power Dissipation	$P_C$	50	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ\text{C}$



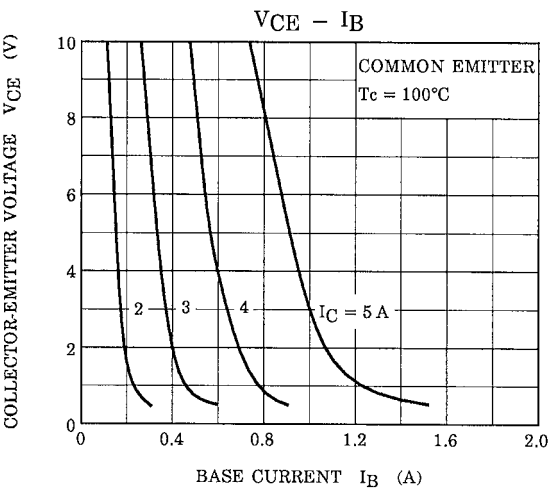
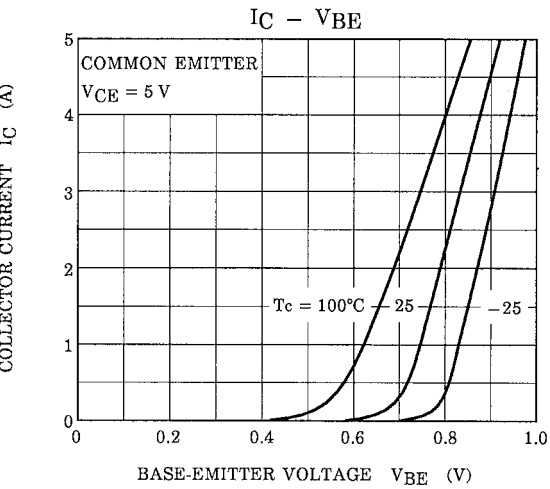
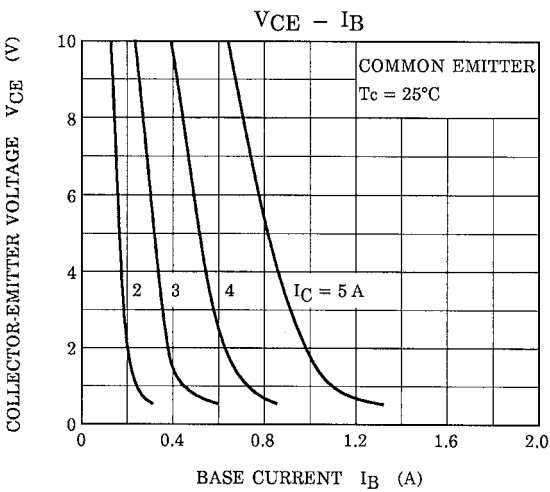
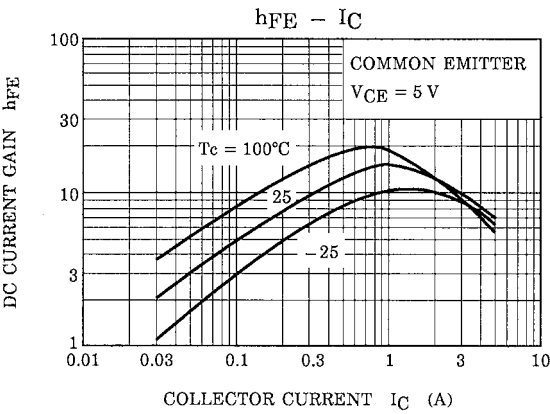
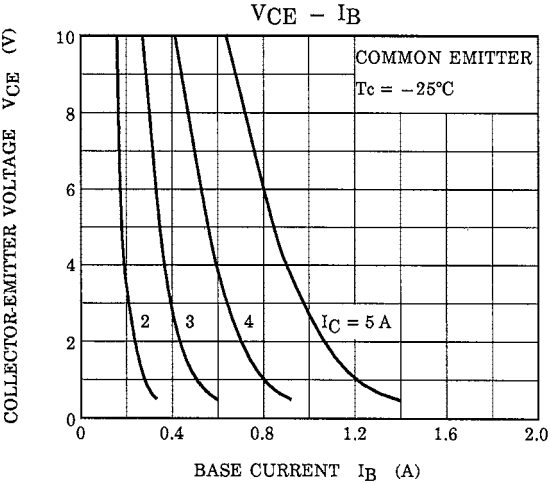
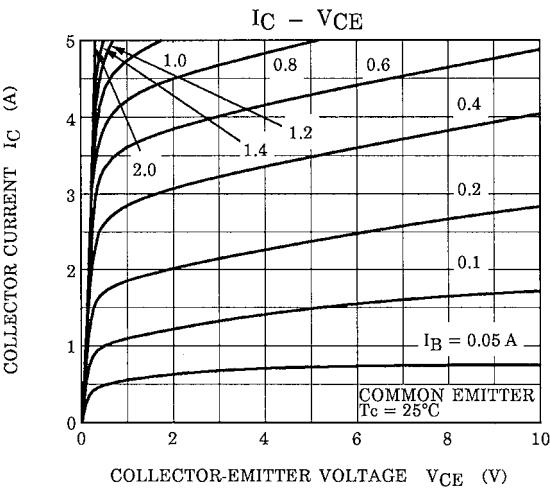
Weight: 5.5 g (typ.)

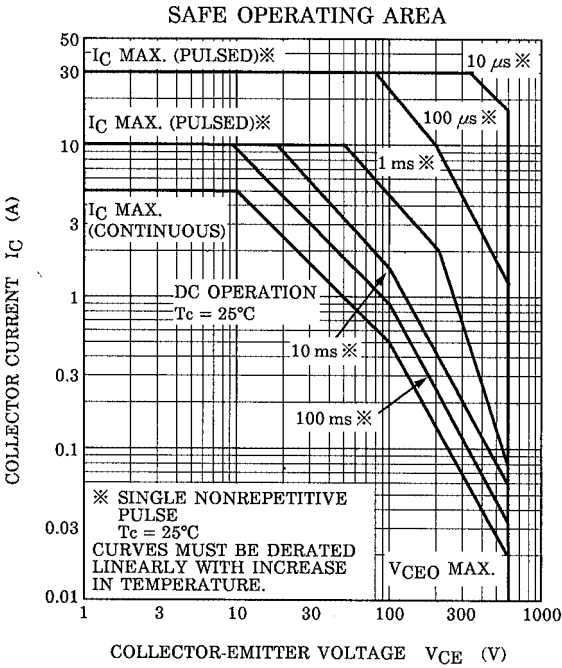
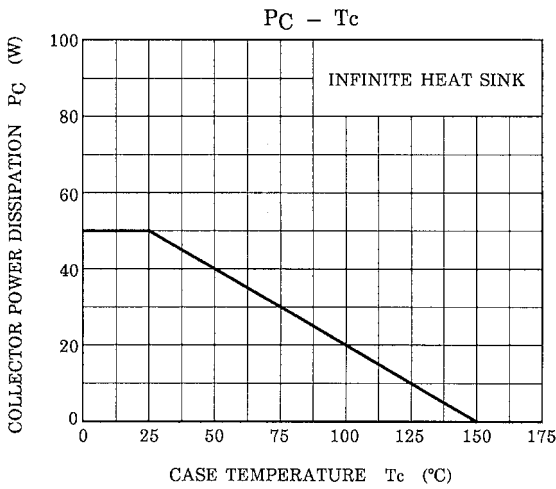
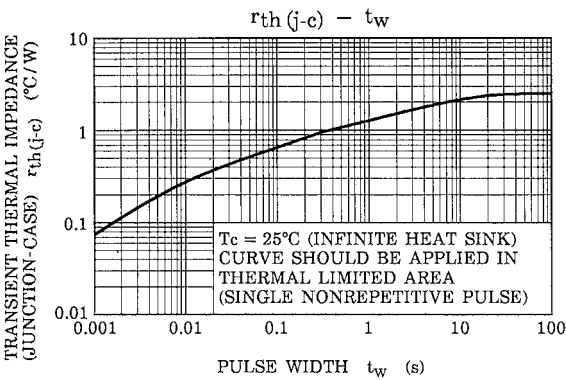
## EQUIVALENT CIRCUIT



## ELECTRICAL CHARACTERISTICS ( $T_c = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 1700 \text{ V}, I_E = 0$	—	—	1	mA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 5 \text{ V}, I_C = 0$	66	—	200	mA
Emitter-Base Breakdown Voltage	$V_{(BR) EBO}$	$I_C = 300 \text{ mA}, I_B = 0$	5	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5 \text{ V}, I_C = 1 \text{ A}$	8	—	28	—
DC Current Gain	$h_{FE(2)}$	$V_{CE} = 5 \text{ V}, I_C = 4 \text{ A}$	5	—	10	—
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 4 \text{ A}, I_B = 0.8 \text{ A}$	—	—	5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 4 \text{ A}, I_B = 0.8 \text{ A}$	—	—	1.5	V
Forward Voltage (Damper Diode)	$V_F$	$I_F = 5 \text{ A}$	—	1.6	2.0	V
Transition Frequency	$f_T$	$V_{CE} = 10 \text{ V}, I_C = 0.1 \text{ A}$	—	3	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$	—	125	—	pF
Switching Time	Storage Time	$I_{CP} = 4 \text{ A}, I_{B1}(\text{end}) = 0.8 \text{ A}$ $f_H = 15.75 \text{ kHz}$	—	7.5	10	$\mu\text{s}$
	Fall Time		—	0.5	1.0	





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