

TOSHIBA Transistor Silicon NPN Triple Diffused Type (PCT Process)

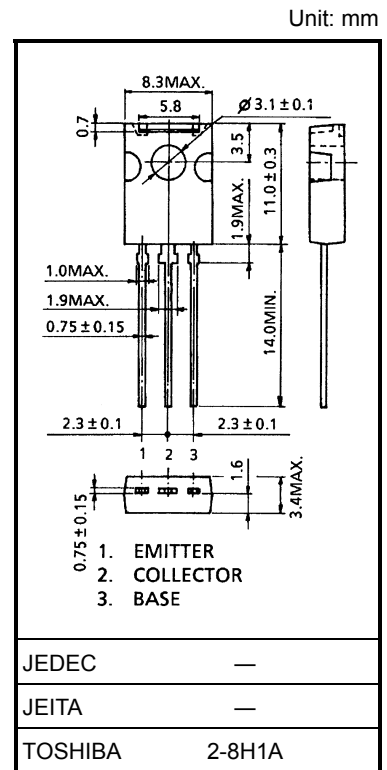
# 2SC3620

Color TV Horizontal Driver Applications  
Color TV Chroma Output Applications

- High breakdown voltage:  $V_{CEO} = 300\text{ V}$
- Recommended for chroma output and driver applications for line-operated TV horizontal.

### Maximum Ratings ( $T_c = 25^\circ\text{C}$ )

Characteristics	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	300	V
Collector-emitter voltage	$V_{CEO}$	300	V
Emitter-base voltage	$V_{EBO}$	7	V
Collector current	$I_C$	100	mA
Base current	$I_B$	50	mA
Collector power dissipation ( $T_a = 25^\circ\text{C}$ )	$P_C$	1.5	W
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to 150	$^\circ\text{C}$

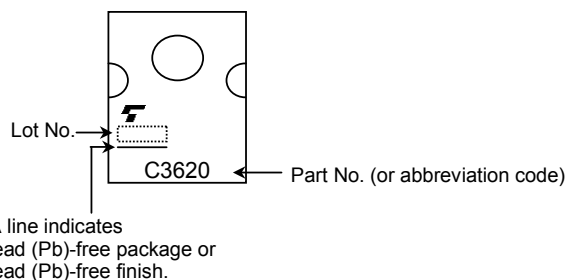


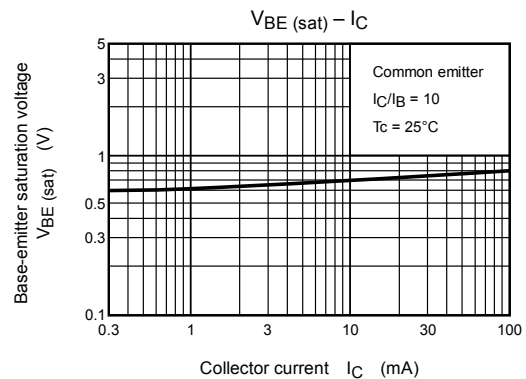
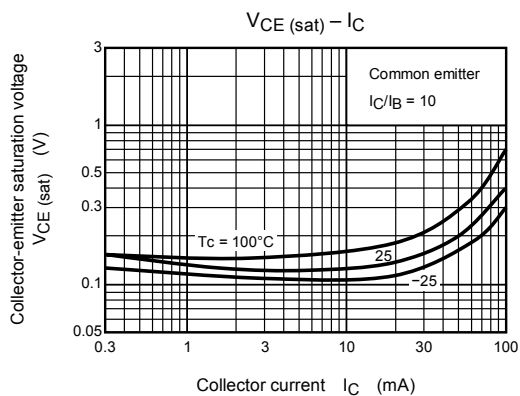
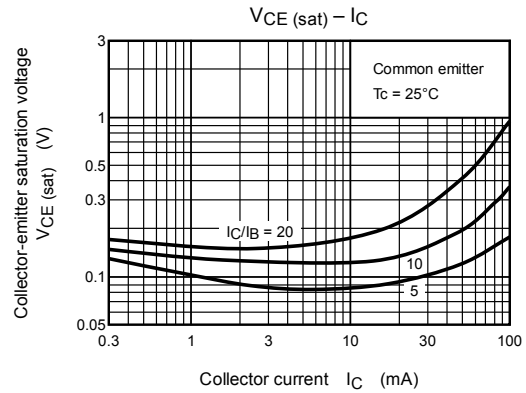
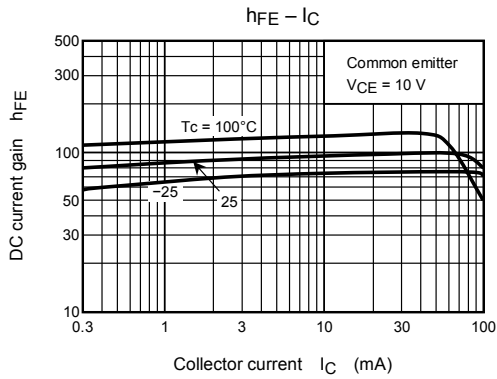
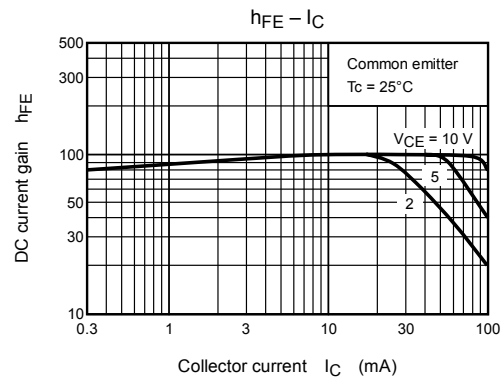
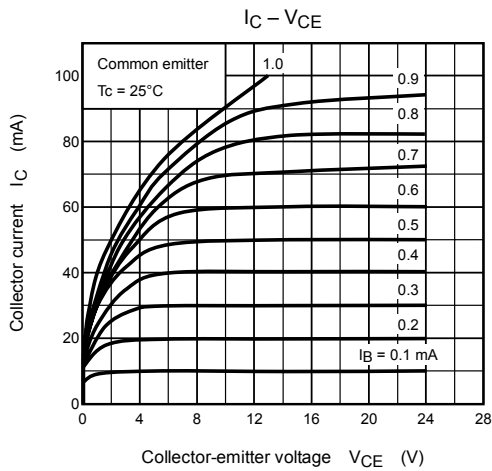
Weight: 0.82 g (typ.)

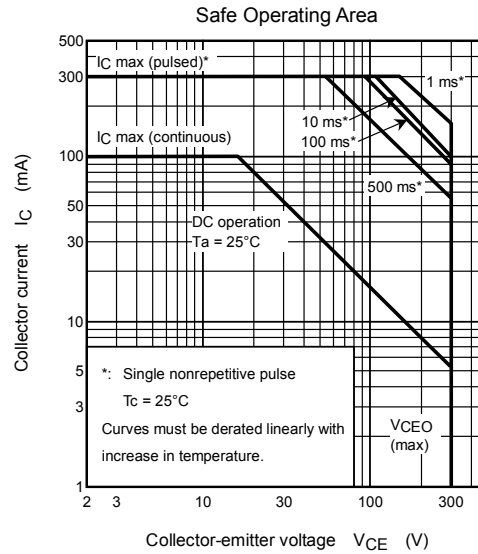
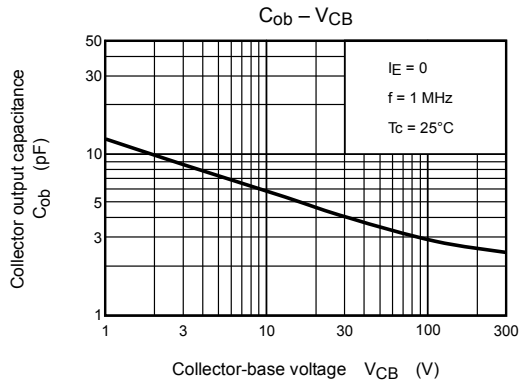
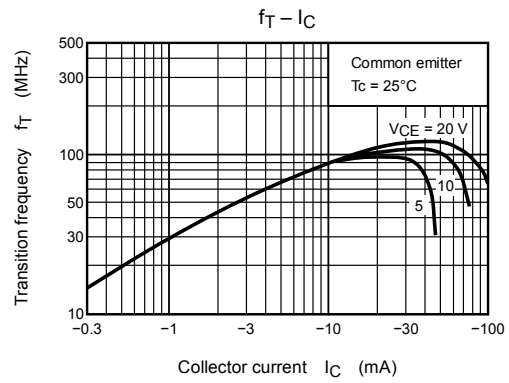
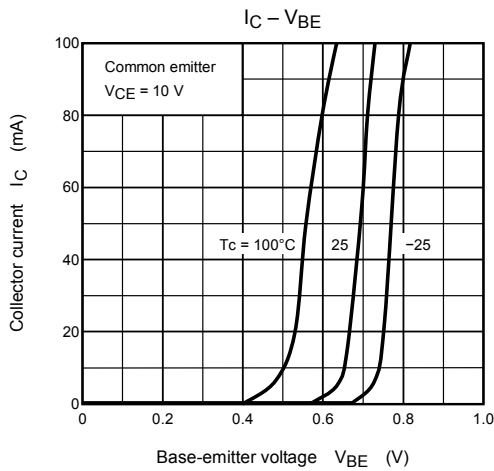
### Electrical Characteristics ( $T_c = 25^\circ\text{C}$ )

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB} = 240\text{ V}, I_E = 0$	—	—	1.0	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 7\text{ V}, I_C = 0$	—	—	1.0	$\mu\text{A}$
DC current gain	$h_{FE} (1)$	$V_{CE} = 10\text{ V}, I_C = 50\text{ mA}$	40	—	170	
	$h_{FE} (2)$	$V_{CE} = 10\text{ V}, I_C = 100\text{ mA}$	20	—	—	
Collector-emitter saturation voltage	$V_{CE (sat)}$	$I_C = 100\text{ mA}, I_B = 20\text{ mA}$	—	—	1.0	V
Base-emitter saturation voltage	$V_{BE (sat)}$	$I_C = 100\text{ mA}, I_B = 20\text{ mA}$	—	—	1.2	V
Transition frequency	$f_T$	$V_{CE} = 10\text{ V}, I_C = 30\text{ mA}$	50	—	—	MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 50\text{ V}, I_E = 0, f = 1\text{ MHz}$	—	—	5.0	pF

### Marking







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