

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT process)

2SC3805

TV Horizontal Deflection Output Applications

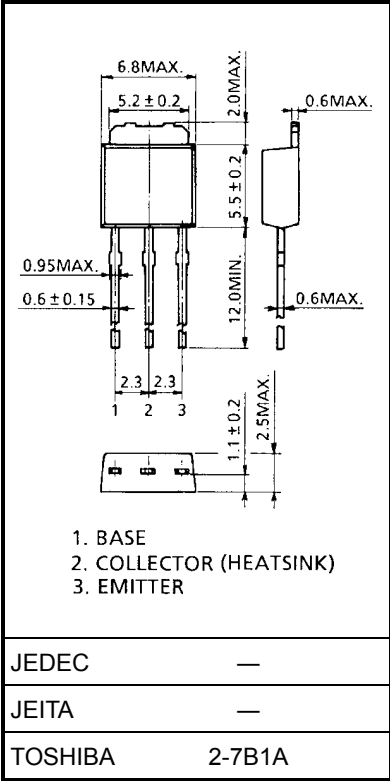
TV Chroma Output Applications

- High voltage: $V_{CEO} = 300\text{ V}$
- Low output capacitance: $C_{ob} = 3.0\text{ pF (typ.)}$

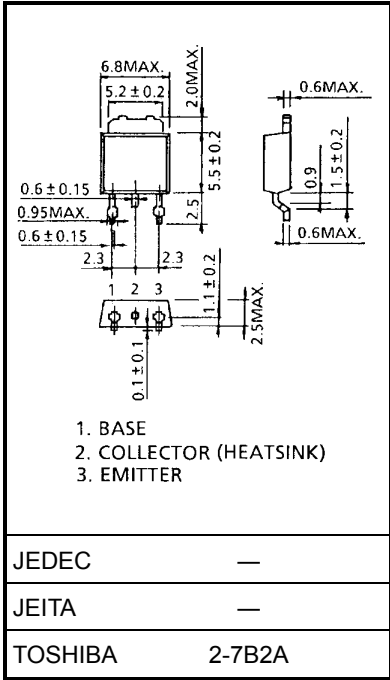
Maximum Ratings (Ta = 25°C)

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	DC	I_C	100	mA
	Pulse	I_{CP}	200	
Base current		I_B	50	mA
Collector power dissipation (Tc = 25°C)		P_C	10	W
Junction temperature		T_j	150	°C
Storage temperature range		T_{stg}	-55 to 150	°C

Unit: mm



Weight: 0.36 g (typ.)

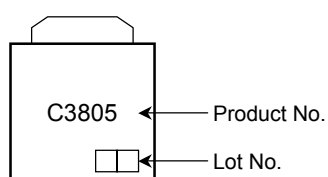


Weight: 0.36 g (typ.)

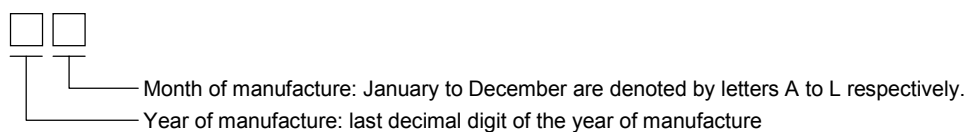
Electrical Characteristics (Ta = 25°C)

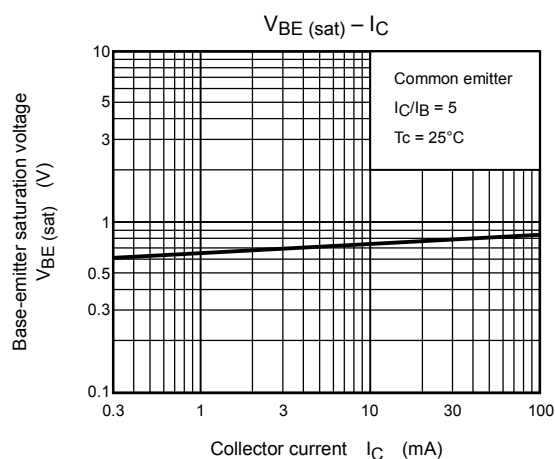
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = 240\text{ V}, I_E = 0$	—	—	1.0	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 7\text{ V}, I_C = 0$	—	—	1.0	mA
DC current gain	$h_{FE} (1)$	$V_{CE} = 10\text{ V}, I_C = 0.5\text{ mA}$	20	—	—	
	$h_{FE} (2)$	$V_{CE} = 10\text{ V}, I_C = 20\text{ mA}$	30	—	200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\text{ mA}, I_B = 1\text{ mA}$	—	—	1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 10\text{ mA}, I_B = 1\text{ mA}$	—	—	1.0	V
Transition frequency	f_T	$V_{CE} = 10\text{ V}, I_C = 20\text{ mA}$	40	70	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 20\text{ V}, I_E = 0, f = 1\text{ MHz}$	—	3.0	—	pF

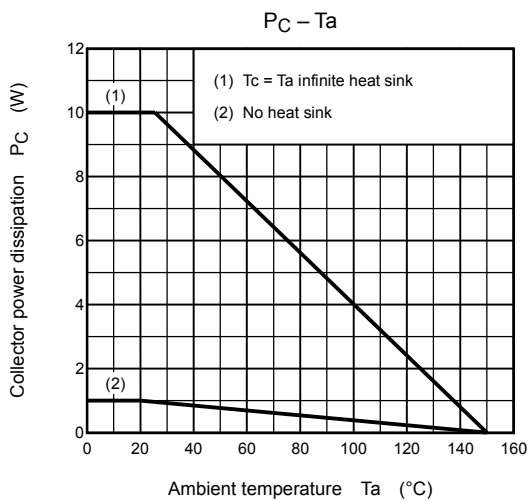
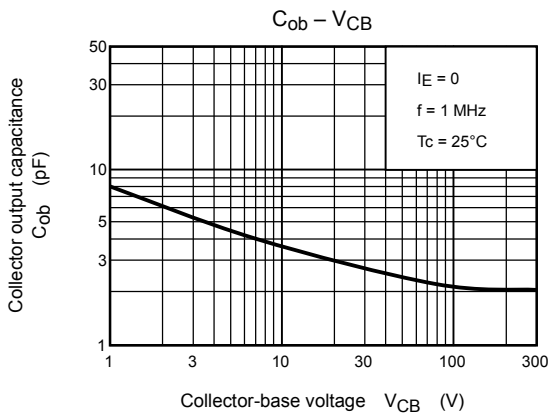
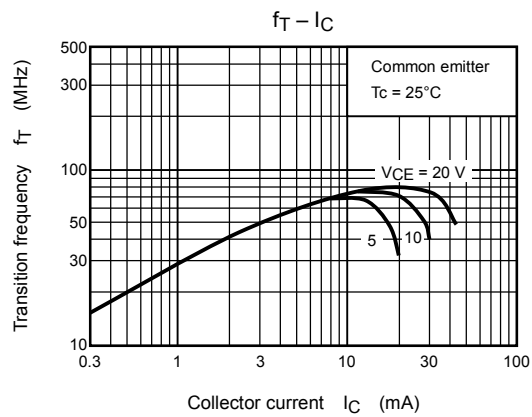
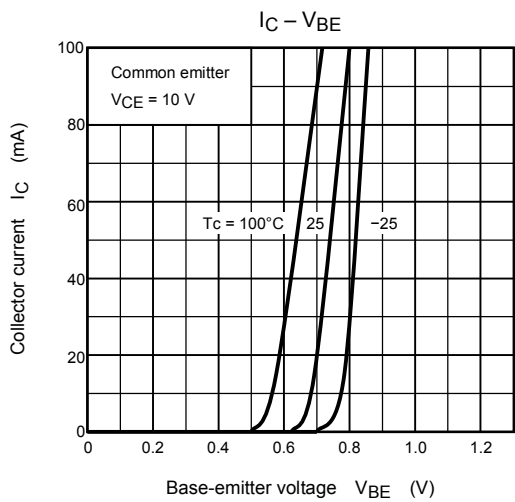
Marking



Explanation of Lot No.







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