

TOSHIBA Transistor Silicon Epitaxial Planar Type

2SC4203

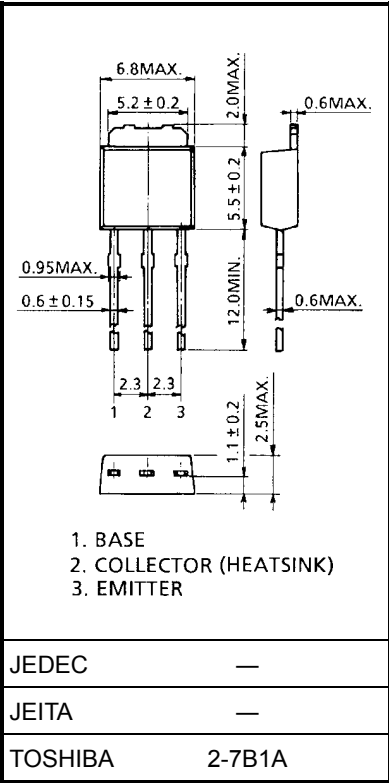
Video Output for High Definition VDT  
High Speed Switching Applications

- High transition frequency:  $f_T = 400\text{ MHz (typ.)}$   
( $V_{CE} = 10\text{ V}$ ,  $I_C = 70\text{ mA}$ )
- Low output capacitance:  $C_{ob} < 5\text{ pF (max)}$  ( $V_{CB} = 30\text{ V}$ )
- High voltage:  $V_{CEO} = 150\text{ V}$
- High power dissipation:  $P_C = 10\text{ W}$

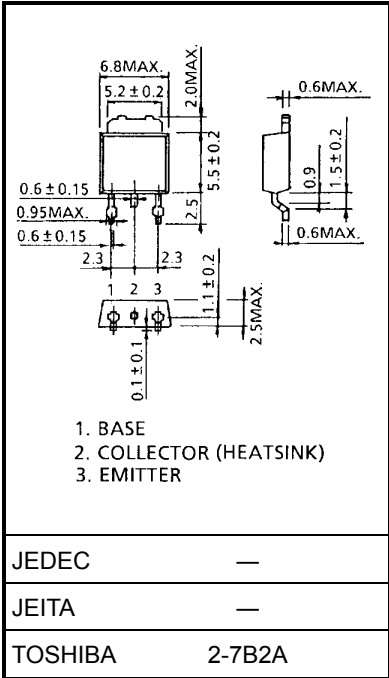
Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Characteristics		Symbol	Rating	Unit
Collector-base voltage		$V_{CBO}$	180	V
Collector-emitter voltage		$V_{CEO}$	150	V
Emitter-base voltage		$V_{EBO}$	5	V
Collector current (DC)		$I_C$	0.3	A
Collector current (pulse)		$I_{CP}$	0.5	A
Base current		$I_B$	0.2	A
Power dissipation	$T_a = 25^\circ\text{C}$	$P_C$	1.0	W
	$T_c = 25^\circ\text{C}$		10	
Junction temperature		$T_j$	150	$^\circ\text{C}$
Storage temperature range		$T_{stg}$	-55 to 150	$^\circ\text{C}$

Unit: mm



Weight: 0.36 g (typ.)

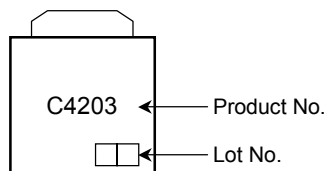


Weight: 0.36 g (typ.)

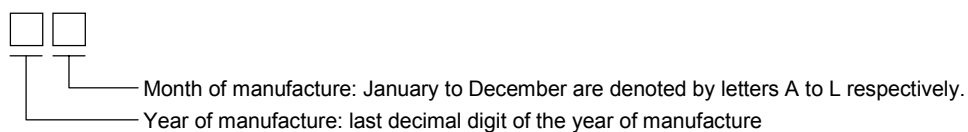
## Electrical Characteristics (Ta = 25°C)

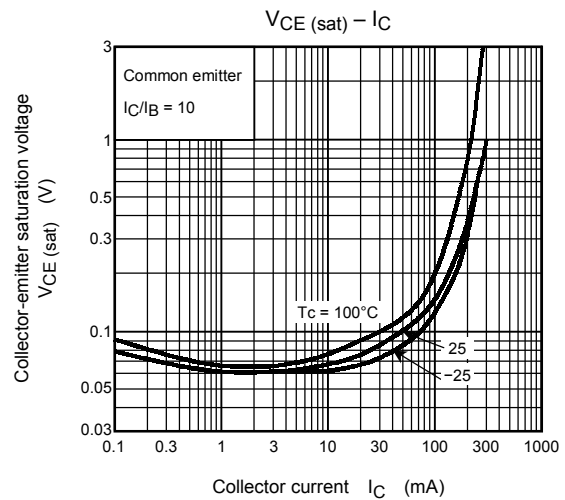
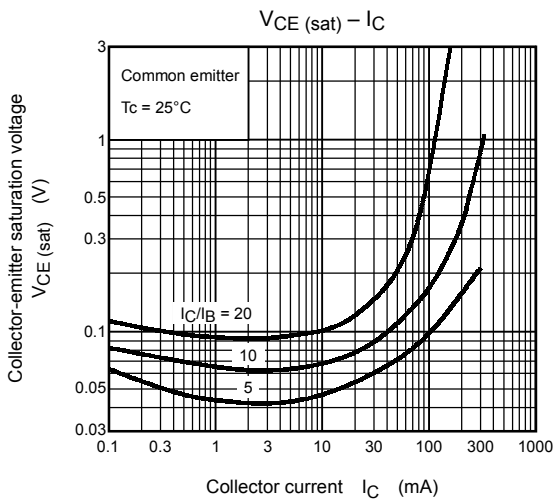
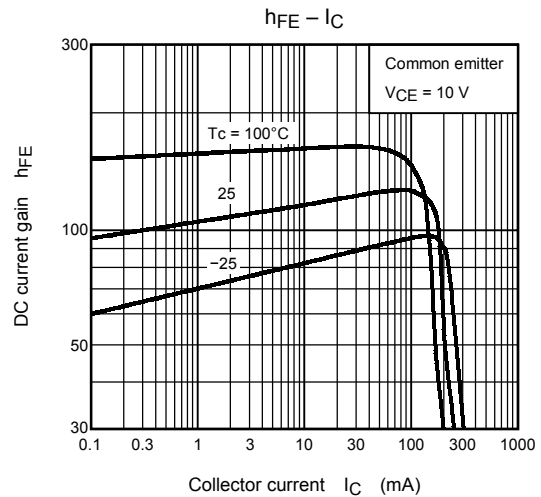
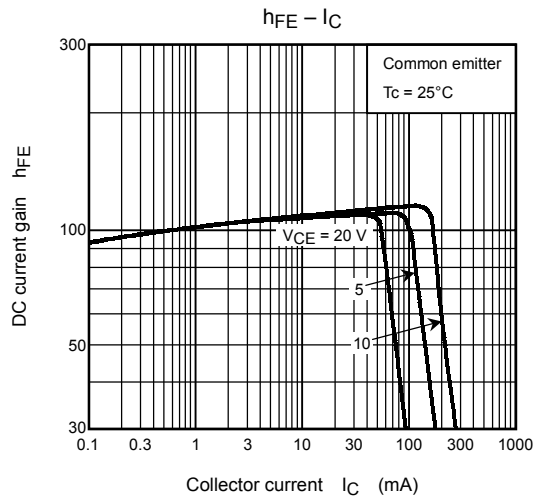
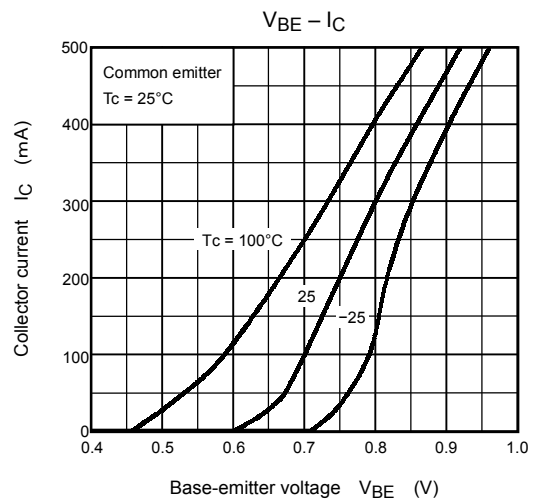
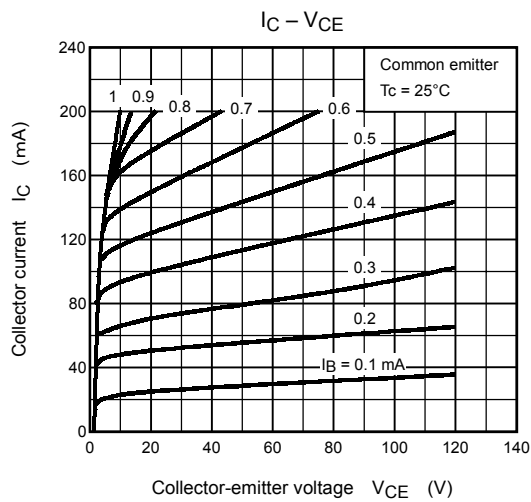
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB} = 150\text{ V}, I_E = 0$	—	—	10	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5\text{ V}, I_C = 0$	—	—	10	$\mu\text{A}$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{ mA}, I_B = 0$	150	—	—	V
DC current gain	$h_{FE(1)}$	$V_{CE} = 10\text{ V}, I_C = 50\text{ mA}$	40	—	240	
	$h_{FE(2)}$	$V_{CE} = 10\text{ V}, I_C = 200\text{ mA}$	20	—	—	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 200\text{ mA}, I_B = 20\text{ mA}$	—	—	2.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 200\text{ mA}, I_B = 20\text{ mA}$	—	—	1.5	V
Transition frequency	$f_T$	$V_{CE} = 10\text{ V}, I_C = 70\text{ mA}$	300	400	—	MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 30\text{ V}, f = 1\text{ MHz}, I_E = 0$	—	4.0	5.0	pF

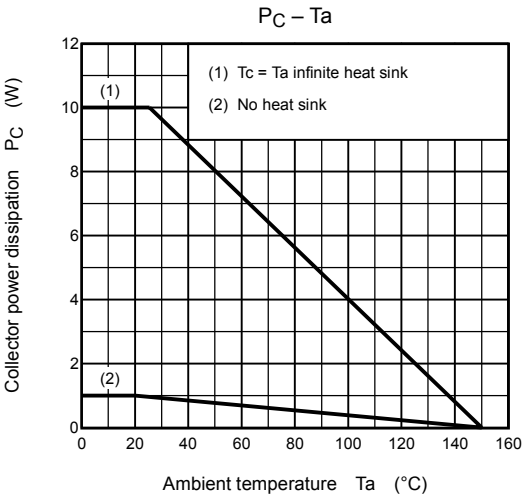
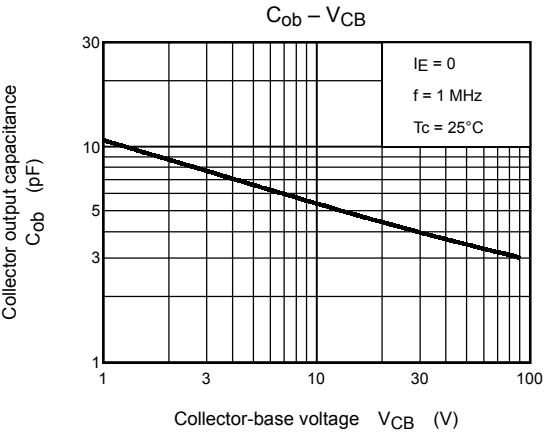
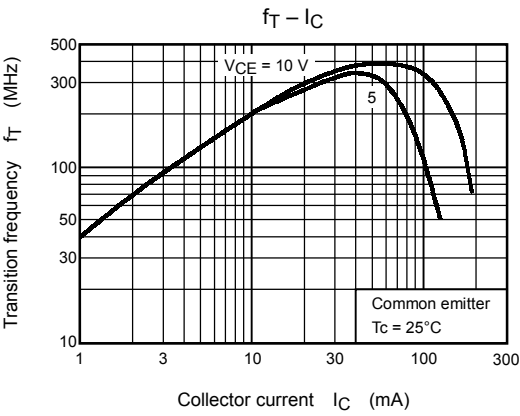
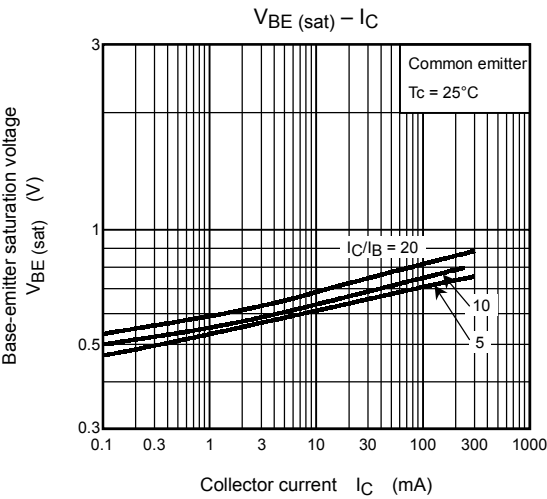
## Marking



## Explanation of Lot No.







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