

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT process)

2SD1220

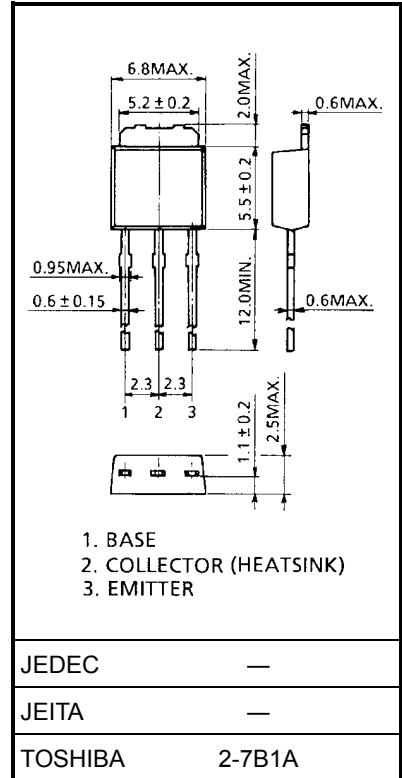
Power Amplifier Applications

- Complementary to 2SB905

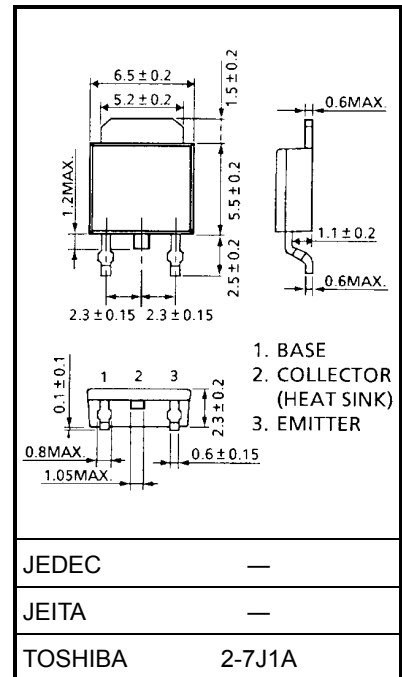
Maximum Ratings (Ta = 25°C)

Characteristics		Symbol	Rating	Unit
Collector-base voltage		V _{CBO}	150	V
Collector-emitter voltage		V _{CEO}	150	V
Emitter-base voltage		V _{EBO}	6	V
Collector current		I _C	1.5	A
Base current		I _B	1.0	A
Collector power dissipation	Ta = 25°C	P _C	1.0	W
	Tc = 25°C		10	
Junction temperature		T _j	150	°C
Storage temperature range		T _{stg}	-55 to 150	°C

Unit: mm



Weight: 0.36 g (typ.)



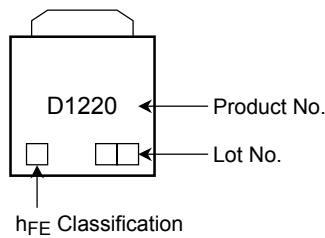
Weight: 0.36 g (typ.)

Electrical Characteristics (Ta = 25°C)

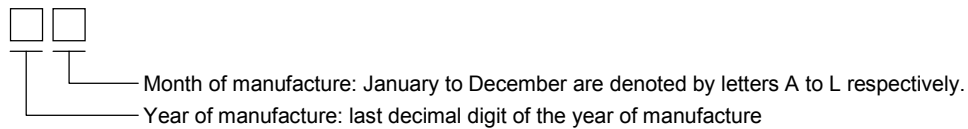
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = 150\text{ V}, I_E = 0$	—	—	1.0	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 6\text{ V}, I_C = 0$	—	—	1.0	μA
Collector-emitter breakdown voltage	$V_{(BR) CEO}$	$I_C = 10\text{ mA}, I_B = 0$	150	—	—	V
DC current gain	h_{FE} (Note)	$V_{CE} = 5\text{ V}, I_C = 200\text{ mA}$	60	—	320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\text{ mA}, I_B = 50\text{ mA}$	—	—	1.5	V
Base-emitter voltage	V_{BE}	$V_{CE} = 5\text{ V}, I_C = 5\text{ mA}$	0.5	—	0.8	V
Transition frequency	f_T	$V_{CE} = 5\text{ V}, I_C = 200\text{ mA}$	20	100	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$	—	13	20	pF

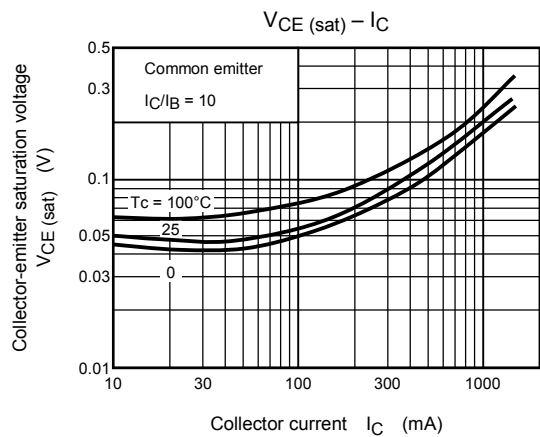
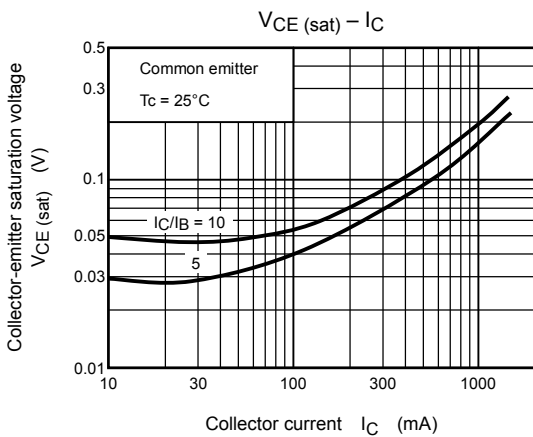
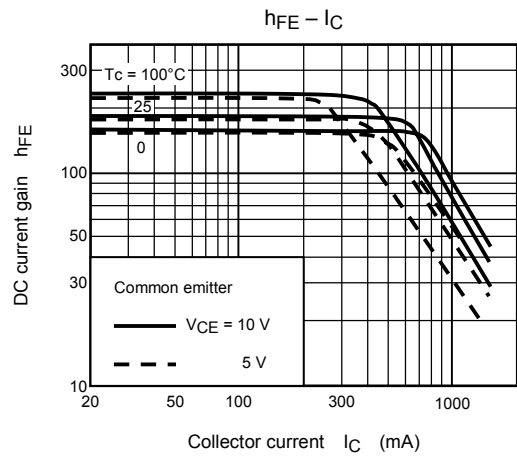
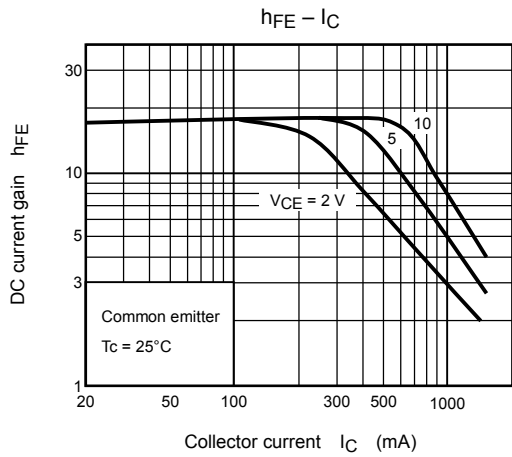
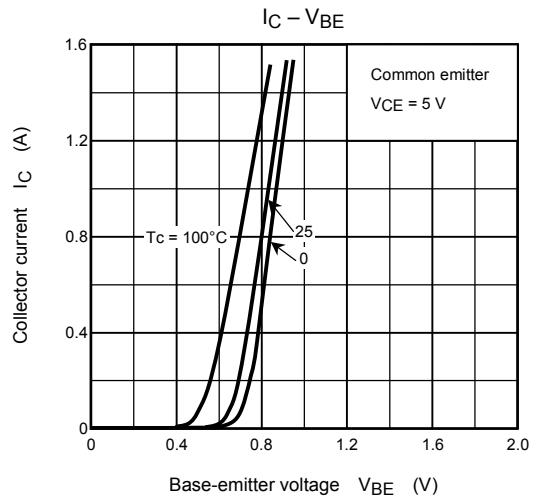
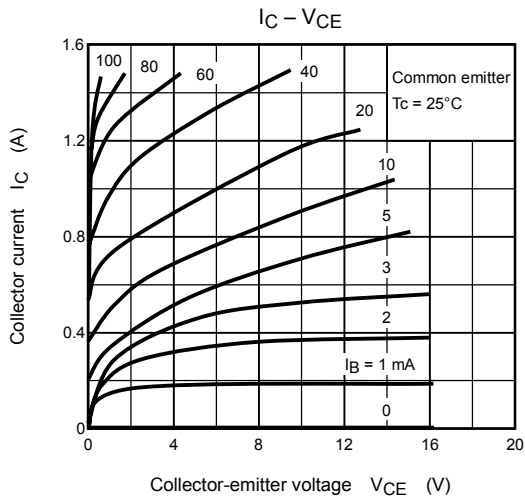
Note: h_{FE} classification R: 60 to 120, O: 100 to 200, Y: 160 to 320

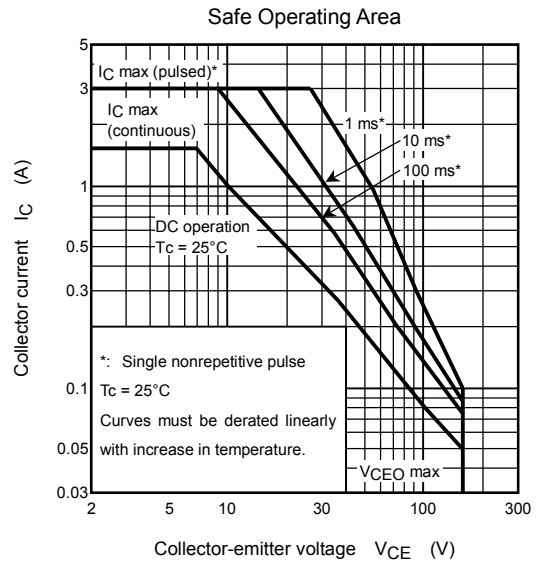
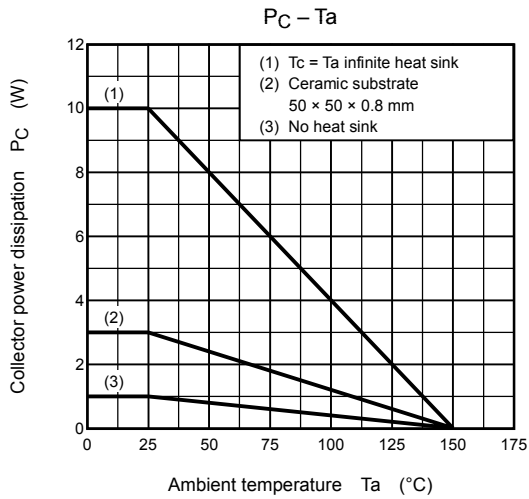
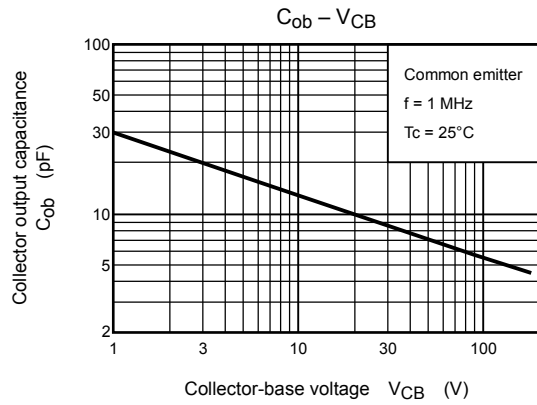
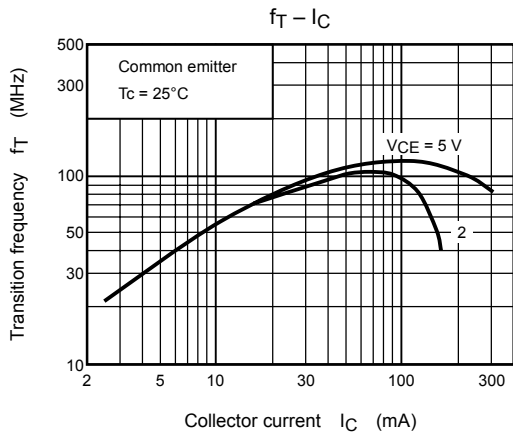
Marking



Explanation of Lot No.







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