**TOSHIBA** 

TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

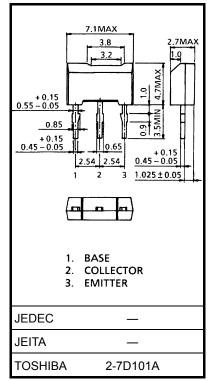
# 2SA1425

## Power Amplifier Applications Driver-Stage Amplifier Applications

• Complementary to 2SC3665.

#### Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V <sub>CBO</sub>	-120	V
Collector-emitter voltage	V <sub>CEO</sub>	-120	V
Emitter-base voltage	V <sub>EBO</sub>	-5	V
Collector current	Ι <sub>C</sub>	-800	mA
Base current	Ι <sub>Β</sub>	-80	mA
Collector power dissipation	PC	1000	mW
Junction temperature	Тј	150	°C
Storage temperature range	T <sub>stg</sub>	-55 to 150	°C



Weight: 0.2 g (typ.)

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/Derating Concept and Methods) and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

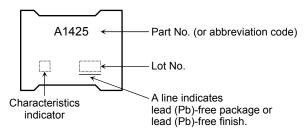
Unit: mm

Electrical Characteristics (Ta = 25°C)

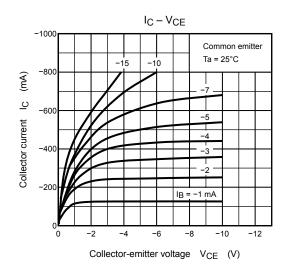
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I <sub>CBO</sub>	$V_{CB} = -120 \text{ V}, I_E = 0$	_	_	-100	nA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5 V, I <sub>C</sub> = 0	_	_	-100	nA
Collector-emitter breakdown voltage	V (BR) CEO	I <sub>C</sub> = -10 mA, I <sub>B</sub> = 0	-120	_	_	V
Emitter-base breakdown voltage	V (BR) EBO	$I_{\rm E} = -1  {\rm mA},  I_{\rm C} = 0$	-5	_	_	V
DC current gain	h <sub>FE</sub> (Note)	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -100 mA	80	_	240	
Collector-emitter saturation voltage	V <sub>CE (sat)</sub>	I <sub>C</sub> = -500 mA, I <sub>B</sub> = -50 mA	_		-1.0	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -500 mA	-		-1.0	V
Transition frequency	fT	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -100 mA	_	120	_	MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = −10 V, I <sub>E</sub> = 0, f = 1 MHz	_	_	40	pF

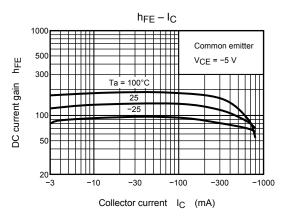
Note: hFE classification O: 80 to 160, Y: 120 to 240

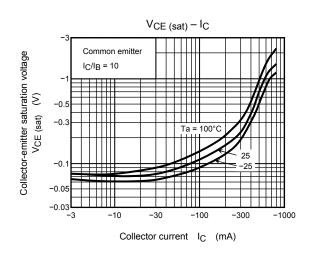
### Marking

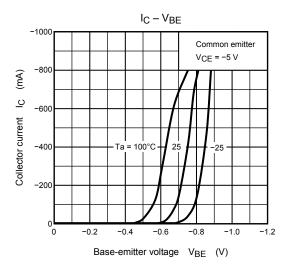


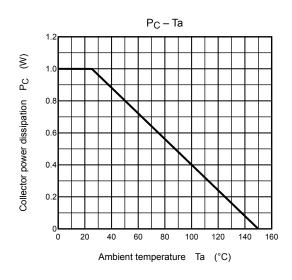
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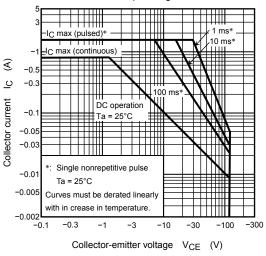












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