TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT process)

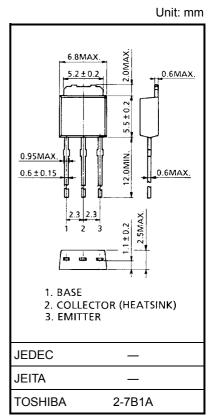
# 2SA1225

# Power Amplifier Applications Driver Stage Amplifier Applications

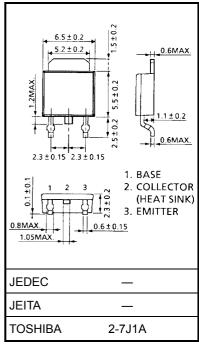
- High transition frequency: fT = 100 MHz (typ.)
- Complementary to 2SC2983

#### **Maximum Ratings (Ta = 25°C)**

Characteristics		Symbol	Rating	Unit	
Collector-base voltage		$V_{CBO}$	-160	V	
Collector-emitter voltage		V <sub>CEO</sub>	-160	V	
Emitter-base voltage		V <sub>EBO</sub>	-5	V	
Collector current		I <sub>C</sub>	-1.5	А	
Base current		Ι <sub>Β</sub>	-0.3	Α	
Collector power dissipation	Ta = 25°C	Pc	1.0	W	
	Tc = 25°C	FC	15		
Junction temperature		Tj	150	°C	
Storage temperature range		T <sub>stg</sub>	-55 to 150	°C	



Weight: 0.36 g (typ.)



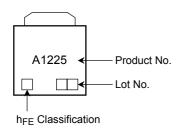
Weight: 0.36 g (typ.)

## **Electrical Characteristics (Ta = 25°C)**

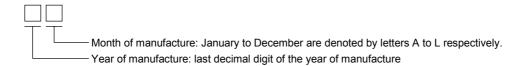
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = -160 V, I <sub>E</sub> = 0	_	_	-1.0	μΑ
Emitter cut-off current	I <sub>EBO</sub>	$V_{EB} = -5 \text{ V}, I_{C} = 0$	_	_	-1.0	μΑ
Collector-emitter breakdown voltage	V (BR) CEO	$I_C = -10 \text{ mA}, I_B = 0$	-160	_	_	V
Emitter-base breakdown voltage	V (BR) EBO	$I_E = -1 \text{ mA}, I_C = 0$	-5	_	_	V
DC current gain	h <sub>FE</sub> (Note)	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -100 mA	70	_	240	
Collector emitter saturation voltage	V <sub>CE</sub> (sat)	I <sub>C</sub> = -500 mA, I <sub>B</sub> = -50 mA	_	_	-1.5	V
Base-emitter voltage	V <sub>BE</sub>	$V_{CE} = -5 \text{ V}, I_{C} = -500 \text{ mA}$	_	_	-1.0	V
Transition frequency	f <sub>T</sub>	$V_{CE} = -10 \text{ V}, I_{C} = -100 \text{ mA}$	_	100	_	MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10 V, I <sub>E</sub> = 0, f = 1 MHz	_	30	_	pF

Note:  $h_{\mbox{\scriptsize FE}}$  classification O: 70 to 140, Y: 120 to 240

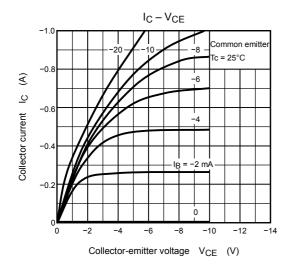
#### Marking

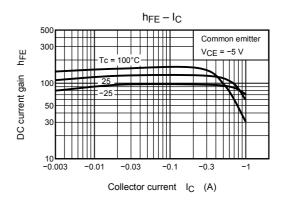


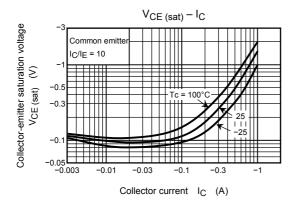
## **Explanation of Lot No.**

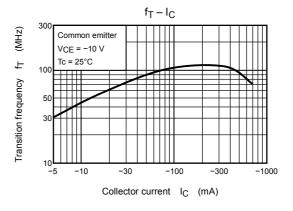


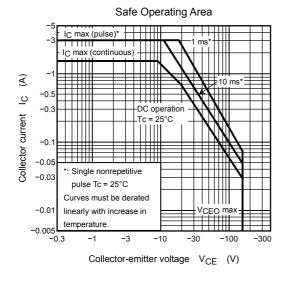
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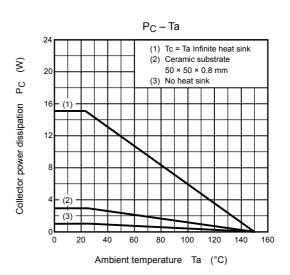












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