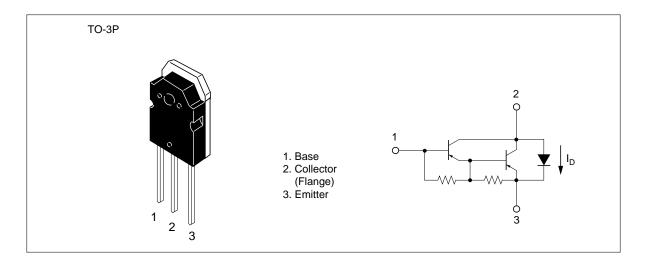
## Silicon PNP Triple Diffused

# **HITACHI**

#### **Application**

Low frequency power amplifier complementary Pair with 2SD2256

#### Outline





## **Absolute Maximum Ratings** $(Ta = 25^{\circ}C)$

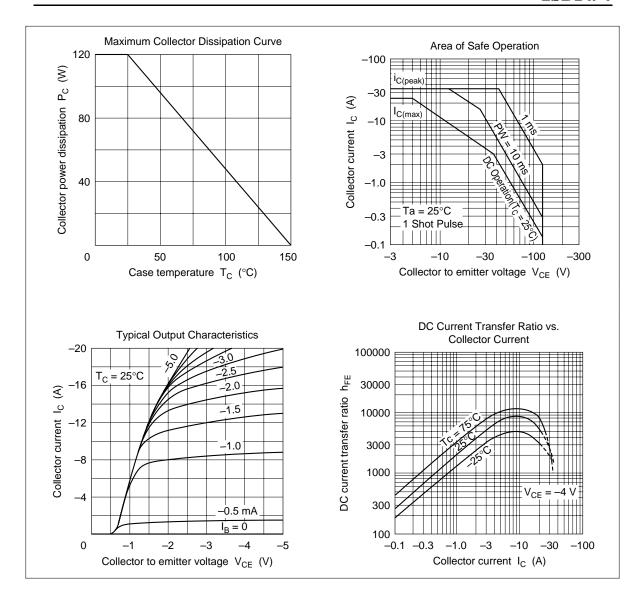
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	-120	V
Collector to emitter voltage	V <sub>CEO</sub>	-120	V
Emitter to base voltage	$V_{EBO}$	<b>-7</b>	V
Collector current	I <sub>c</sub>	-25	A
Collector peak current	I <sub>C(peak)</sub>	-35	A
Collector power dissipation	P <sub>c</sub> *1	120	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C
C to E diode forward current	I <sub>D</sub> *1	25	A

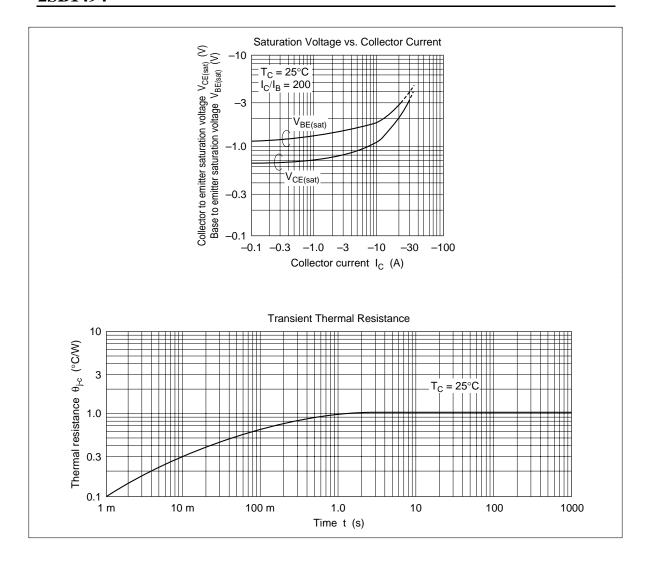
Note: 1. Value at  $T_c = 25$ °C.

#### **Electrical Characteristics** ( $Ta = 25^{\circ}C$ )

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-120	_	_	V	$I_{\rm C} = -0.1 \text{ mA}, I_{\rm E} = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-120	_	_	V	$I_{\rm C}$ = -25 mA, $R_{\rm BE}$ =
Collector to emitter sustain voltage	$V_{\text{CEO(sus)}}$	-120	_	_	V	$I_{\rm C}$ = -200 mA, $R_{\rm BE}$ =
Emitter to base breakdown voltage	$V_{(BR)EBO}$	<b>-7</b>	_	_	V	$I_{\rm E} = -50 \text{ mA}, I_{\rm C} = 0$
Collector cutoff current	I <sub>CBO</sub>	_	_	-10	μΑ	$V_{CB} = -100 \text{ V}, I_{E} = 0$
	I <sub>CEO</sub>	_	_	-10	_	V <sub>CE</sub> = -100 V, R <sub>BE</sub> =
DC current transfer ratio	h <sub>FE1</sub>	2000	_	20000		$V_{CE} = -4 \text{ V}, I_{C} = -12 \text{ A}^{*1}$
	h <sub>FE2</sub>	500	_			$V_{CE} = -4 \text{ V}, I_{C} = -25 \text{ A}^{*1}$
Collector to emitter saturation	V <sub>CE(sat)1</sub>	_	_	-2.0	V	$I_{\rm C} = -12 \text{ A}, I_{\rm B} = -24 \text{ mA}^{*1}$
voltage	V <sub>CE(sat)2</sub>	_	_	-3.5		$I_{\rm C} = -25 \text{ A}, I_{\rm B} = -250 \text{ mA}^{*1}$
Base to emitter saturation	$V_{BE(sat)1}$	_	_	-3.0	V	$I_{\rm C} = -12 \text{ A}, I_{\rm B} = -24 \text{ mA}$
voltage	$V_{BE(sat)2}$	_	_	-4.5		$I_{\rm C} = -25 \text{ A}, I_{\rm B} = -250 \text{ mA}^{*1}$

Note: 1. Pulse test.





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