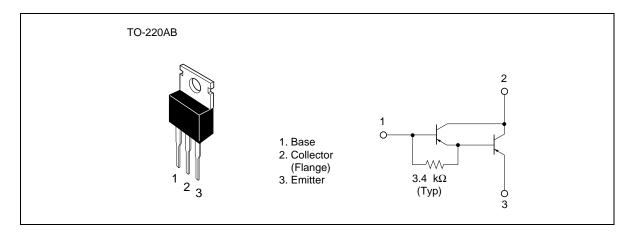
Silicon PNP Epitaxial

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Application

Low frequency power amplifier complementary pair with 2SD1377(K)

Outline



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

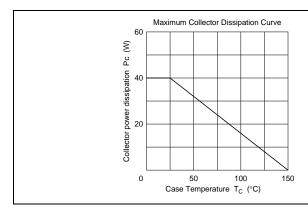
Item	Symbol	Rating	Unit
Collector to base voltage	V _{CBO}	-120	V
Collector to emitter voltage	V _{CEO}	-120	V
Emitter to base voltage	$V_{\scriptscriptstyle{EBO}}$	- 7	V
Collector current	I _c	-8	A
Collector peak current	I _{C(peak)}	– 12	A
Collector power dissipation	P _c *1	40	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

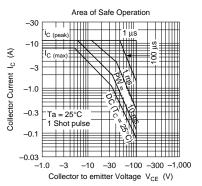
Note: 1. Value at $T_c = 25^{\circ}C$

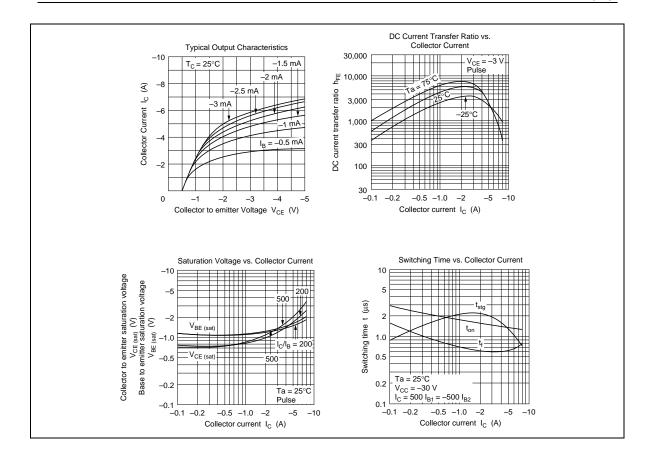
Electrical Characteristics (Ta = 25°C)

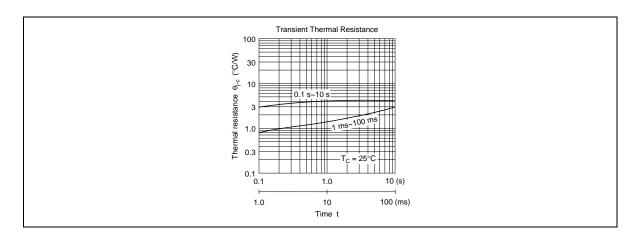
Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-120	_	_	V	$I_{c} = -25 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{\text{(BR)EBO}}$	-7	_	_	V	$I_{\rm E} = -50$ mA, $I_{\rm C} = 0$
Collector cutoff current	I _{CBO}	_	_	-100	μΑ	$V_{CB} = -120 \text{ V}, I_{E} = 0$
	I _{CEO}	_	_	-10	μΑ	$V_{CE} = -100 \text{ V}, R_{BE} = \infty$
DC current transfer ratio	h _{FE}	1000	_	20000		$V_{CE} = -3 \text{ V}, I_{C} = -4 \text{ A}^{*1}$
Collector to emitter saturation voltage	$V_{\text{CE(sat)1}}$	_	_	-1.5	V	$I_{\rm c} = -4 \text{ A}, I_{\rm B} = -8 \text{ mA*}^{1}$
	V _{CE(sat)2}		_	-3.0	V	$I_{\rm C} = -8 \text{ A}, I_{\rm B} = -80 \text{ mA}^{*1}$
Base to emitter saturation voltage	$V_{\text{BE(sat)1}}$	_	_	-2.0	V	$I_{\rm c} = -4 \text{ A}, I_{\rm B} = -8 \text{ mA*}^{1}$
	$V_{\text{BE(sat)2}}$	_	_	-3.5	٧	$I_{\rm C} = -8 \text{ A}, I_{\rm B} = -80 \text{ mA}^{*1}$
Turn on time	t _{on}		1.5		μs	$I_{\rm C} = -4 \text{ A}, I_{\rm B1} = -I_{\rm B2} = -8 \text{ mA}$
Storage time	t _{stg}	_	2.0	_	μs	_
Fall time	t,	_	0.5	_	μs	

Note: 1. Pulse test









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