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Renesas Technology Corp. Customer Support Dept. April 1, 2003



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### Silicon PNP Triple Diffused

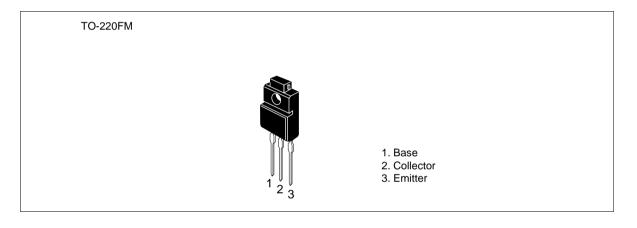


ADE-208-879 (Z) 1st. Edition September 2000

#### Application

Low frequency power amplifier color TV vertical deflection output complementary pair with 2SD2337

#### Outline



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

Item	Symbol	Ratings	Unit	
Collector to base voltage	V <sub>CBO</sub>	-200	V	
Collector to emitter voltage	V <sub>CEO</sub>	-150	V	
Emitter to base voltage	V <sub>EBO</sub>	-6	V	
Collector current	I <sub>c</sub>	-2	А	
Collector peak current	I <sub>C(peak)</sub>	-5	А	
Collector power dissipation	Pc	1.5	W	
	<b>P</b> <sub>c</sub> * <sup>1</sup>	20		
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-45 to +150	°C	

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

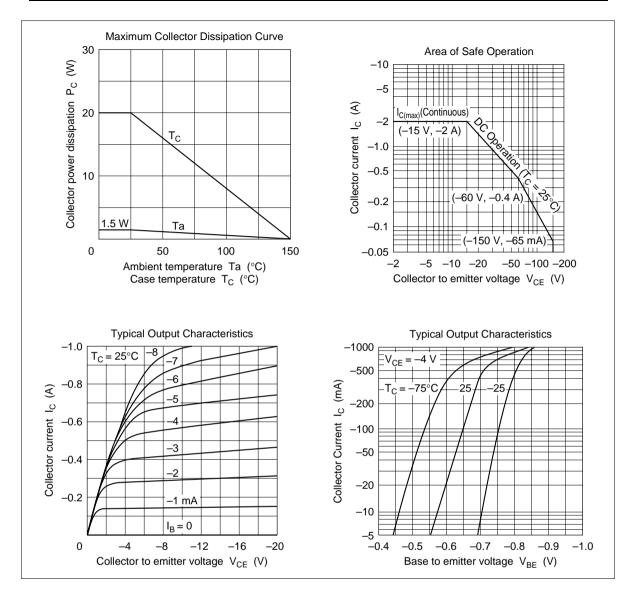
#### **Electrical Characteristics** (Ta = 25°C)

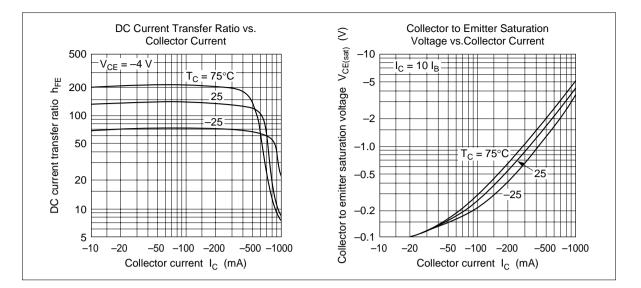
Item	Symbol	Min	Тур	Max	Unit	Test conditions		
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	-150	_	_	V	$I_c = -50$ mA, $R_{\scriptscriptstyle BE} = \infty$		
Emitter to base breakdown voltage	$V_{\rm (BR)EBO}$	-6	—	_	V	$I_{\rm E} = -5$ mA, $I_{\rm C} = 0$		
Collector cutoff current	I <sub>CBO</sub>	_	—	-1	μΑ	$V_{CB} = -120 \text{ V}, \text{ I}_{E} = 0$		
DC current transfer ratio	$h_{\text{FE1}}^{*1}$	60	—	200		$V_{ce} = -4$ V, $I_c = -50$ mA		
	$h_{\text{FE2}}$	60	—	—		$V_{ce} = -10 \text{ V}, \text{ I}_{c} = -500 \text{ mA}^{*2}$		
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	—	_	-3	V	$I_{c} = -500 \text{ mA}, I_{B} = -50 \text{ mA}$		
Base to emitter voltage	$V_{BE}$	_	—	-1	V	$I_{ce} = -4 \text{ A}, I_c = -50 \text{ mA}$		
Notes: 1. The 2SB1530 is grouped by $h_{FE1}$ as follows.								

 B
 C

 60 to 120
 100 to 200

2. Pulse test.





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