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# 2SB1387

Silicon PNP Epitaxial, Darlington

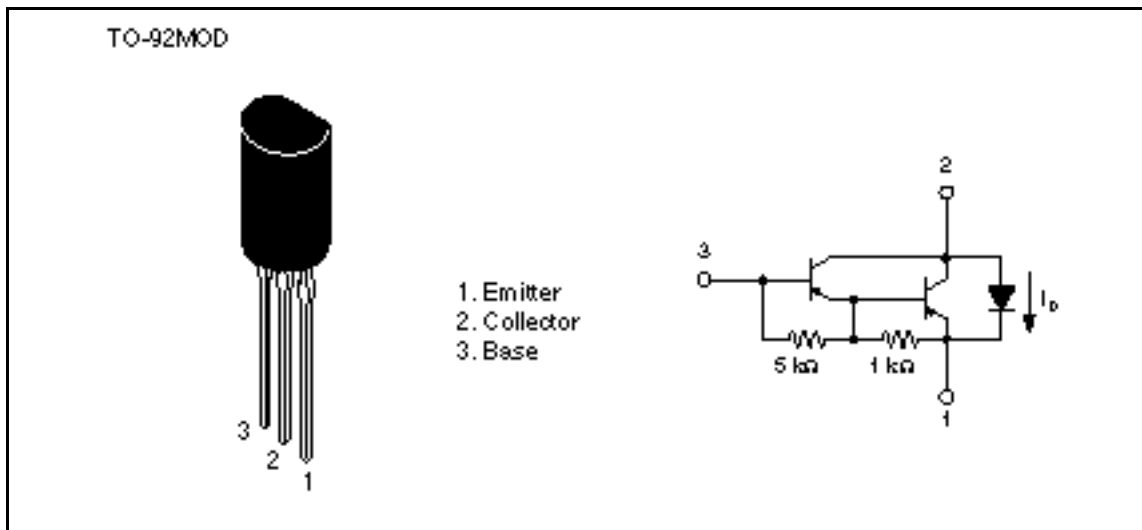
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## Application

- Low frequency power amplifier
- Complementary pair with 2SD1978

## Outline



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## 2SB1387

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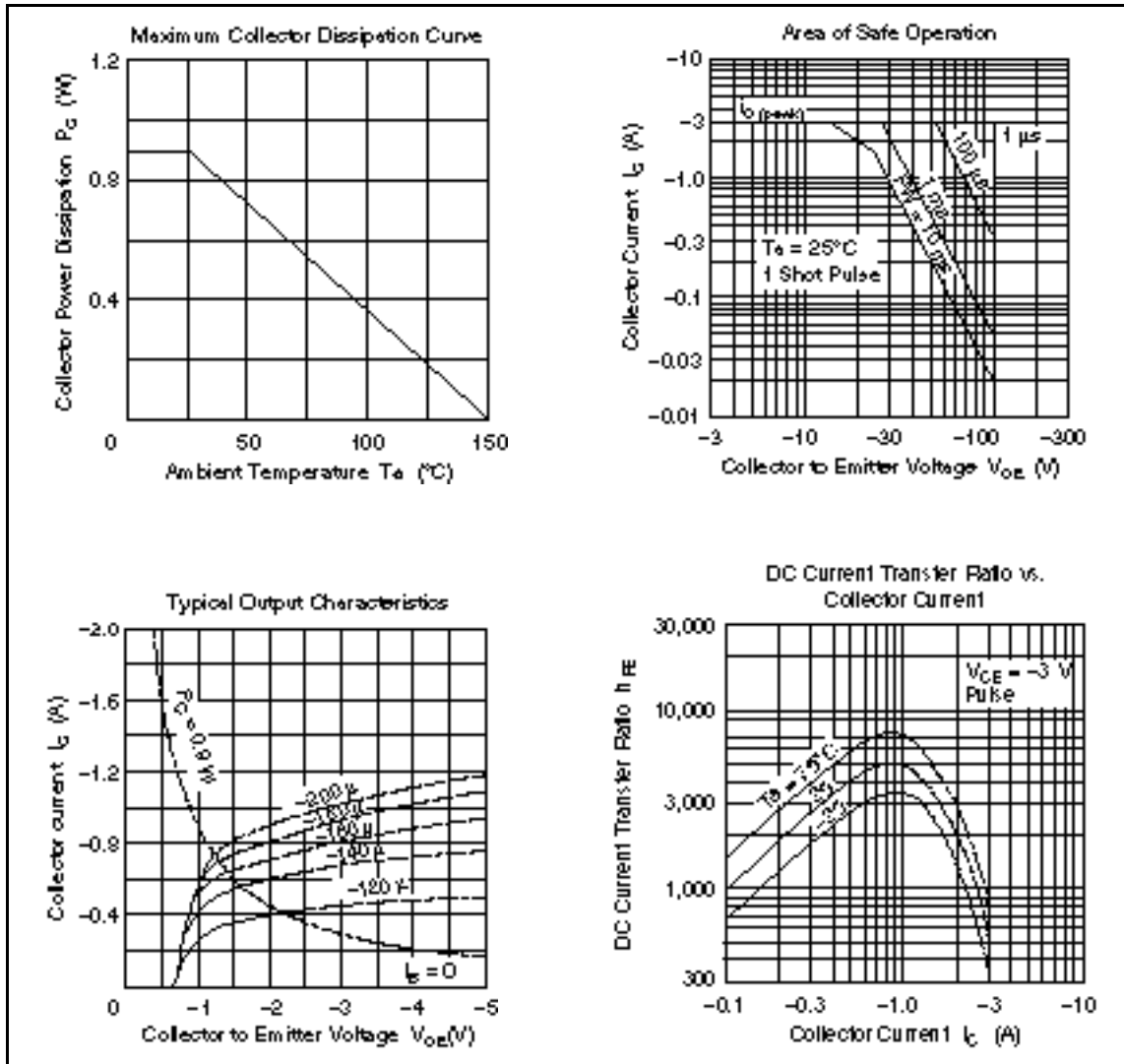
### Absolute Maximum Ratings (Ta = 25°C)

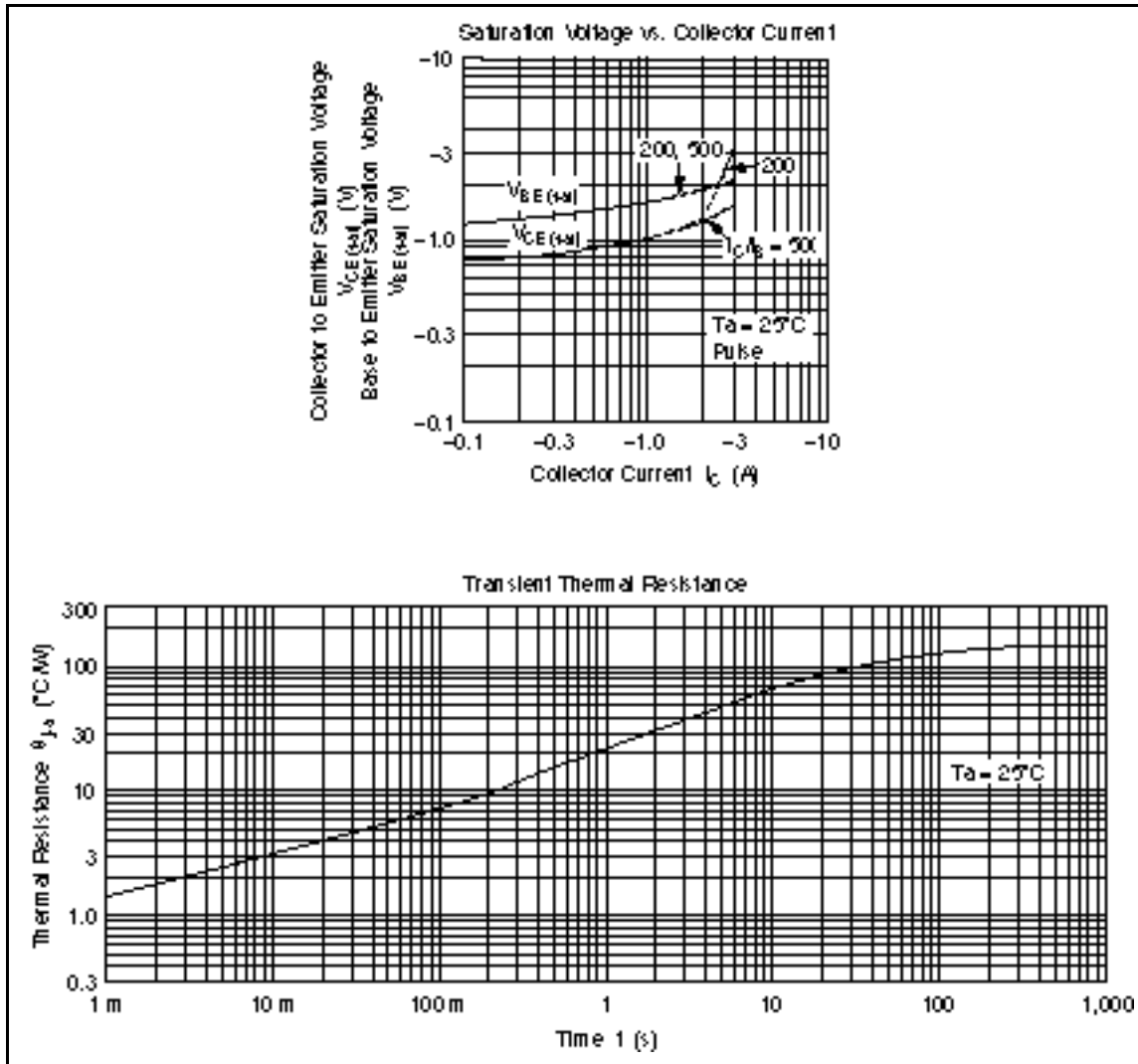
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	-120	V
Collector to emitter voltage	$V_{CEO}$	-120	V
Emitter to base voltage	$V_{EBO}$	-7	V
Collector current	$I_C$	-1.5	A
Collector peak current	$i_{C(peak)}$	-3.0	A
C to E diode forward current	$I_D$	1.5	A
Collector power dissipation	$P_C$	0.9	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

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

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-120	—	—	V	$I_C = -0.1$ mA, $I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-120	—	—	V	$I_C = -10$ mA, $R_{BE} =$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-7	—	—	V	$I_E = -50$ mA, $I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	-1	μA	$V_{CB} = -100$ V, $I_E = 0$
	$I_{CEO}$	—	—	-10	μA	$V_{CE} = -100$ V, $R_{BE} =$
DC current transfer ratio	$h_{FE}$	2000	—	10000		$V_{CE} = -3$ V, $I_C = -1$ A* <sup>1</sup>
Collector to emitter saturation voltage	$V_{CE(sat)1}$	—	—	-1.5	V	$I_C = -1$ A, $I_B = -1$ mA* <sup>1</sup>
	$V_{CE(sat)2}$	—	—	-2.0	V	$I_C = -1.5$ A, $I_B = -1.5$ mA* <sup>1</sup>
Base to emitter saturation voltage	$V_{BE(sat)1}$	—	—	-2.0	V	$I_C = -1$ A, $I_B = -1$ mA* <sup>1</sup>
	$V_{BE(sat)2}$	—	—	-2.5	V	$I_C = -1.5$ A, $I_B = -1.5$ mA* <sup>1</sup>
C to E diode forward voltage	$V_D$	—	—	3.0	V	$I_D = 1.5$ A* <sup>1</sup>

Note: 1. Pulse test





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