

2SD2532

Silicon NPN Epitaxial

Application

Low frequency power amplifier.

Features

- Low saturation voltage.
 $V_{CE(sat)} \leq 0.2 \text{ V max.}$
- Large current capacitance.
 $I_C = 2 \text{ A}$

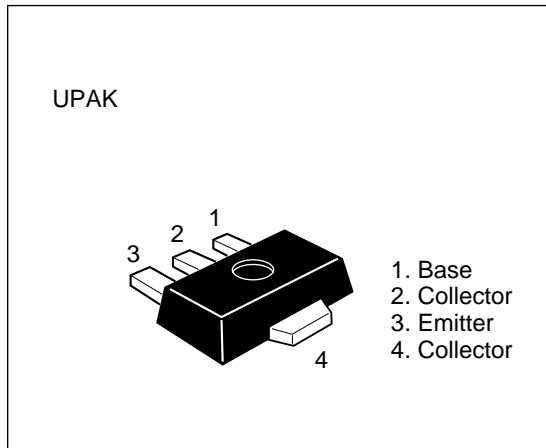


Table 1 Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	50	V
Collector to emitter voltage	V_{CEO}	50	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	2	A
Collector peak current	$i_{C(peak)}$ *	3	A
Collector power dissipation	P_C	1	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

* $PW \leq 10 \text{ ms}$, duty cycle $\leq 20 \%$

** When using the alumina ceramic board (12.5 x 20 x 0.7 mm)

Note: Marking is "JS"

Attention: This device is very sensitive to electro static discharge.

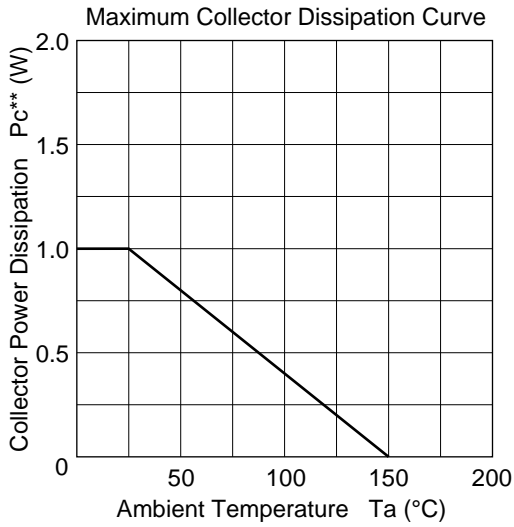
It is recommended to adopt appropriate cautions when handling this transistor.

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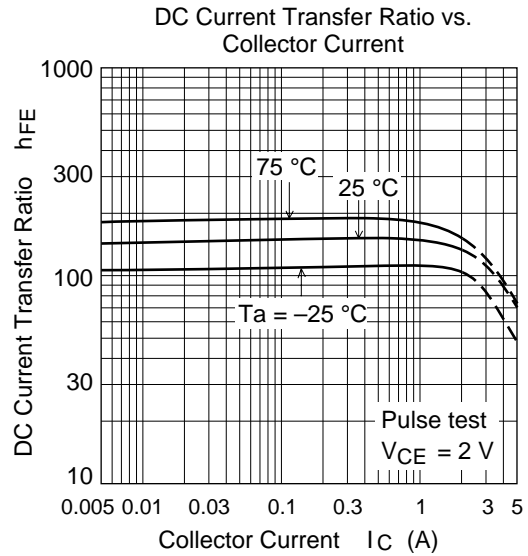
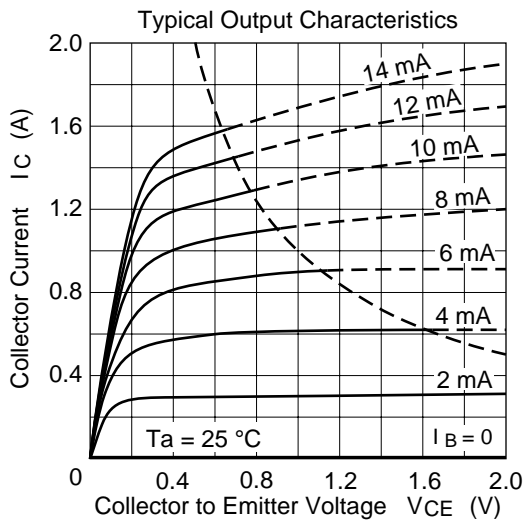
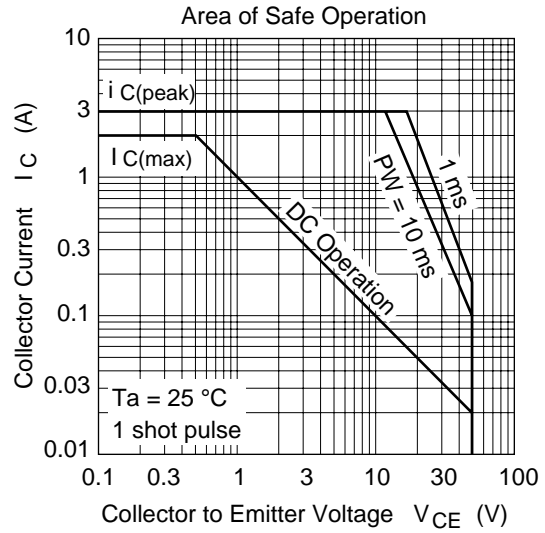
Table 2 Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	50	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	50	—	—	V	$I_C = 1 mA, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	$I_E = 10 \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	1	μA	$V_{CB} = 40 V, I_E = 0$
Collector cutoff current	I_{CEO}	—	—	5	μA	$V_{CE} = 40 V, R_{BE} = \infty$
Emitter cutoff current	I_{EBO}	—	—	1	μA	$V_{EB} = 5 V, I_C = 0$
DC current transfer ratio	h_{FE1}	120	—	300		$V_{CE} = 2 V, I_C = 0.5 A^*$
DC current transfer ratio	h_{FE2}	40	—	—		$V_{CE} = 2 V, I_C = 1.5 A^*$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	0.12	0.2	V	$I_C = 1 A, I_B = 50 mA^*$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	0.85	1.2	V	$I_C = 1 A, I_B = 50 mA^*$
Gain bandwidth product	f_T	—	120	—		$V_{CE} = 2 V, I_C = 50 mA$
Collector output capacitance	C_{ob}	—	20	—		$V_{CB} = 10 V, I_E = 0$ $f = 1 MHz$

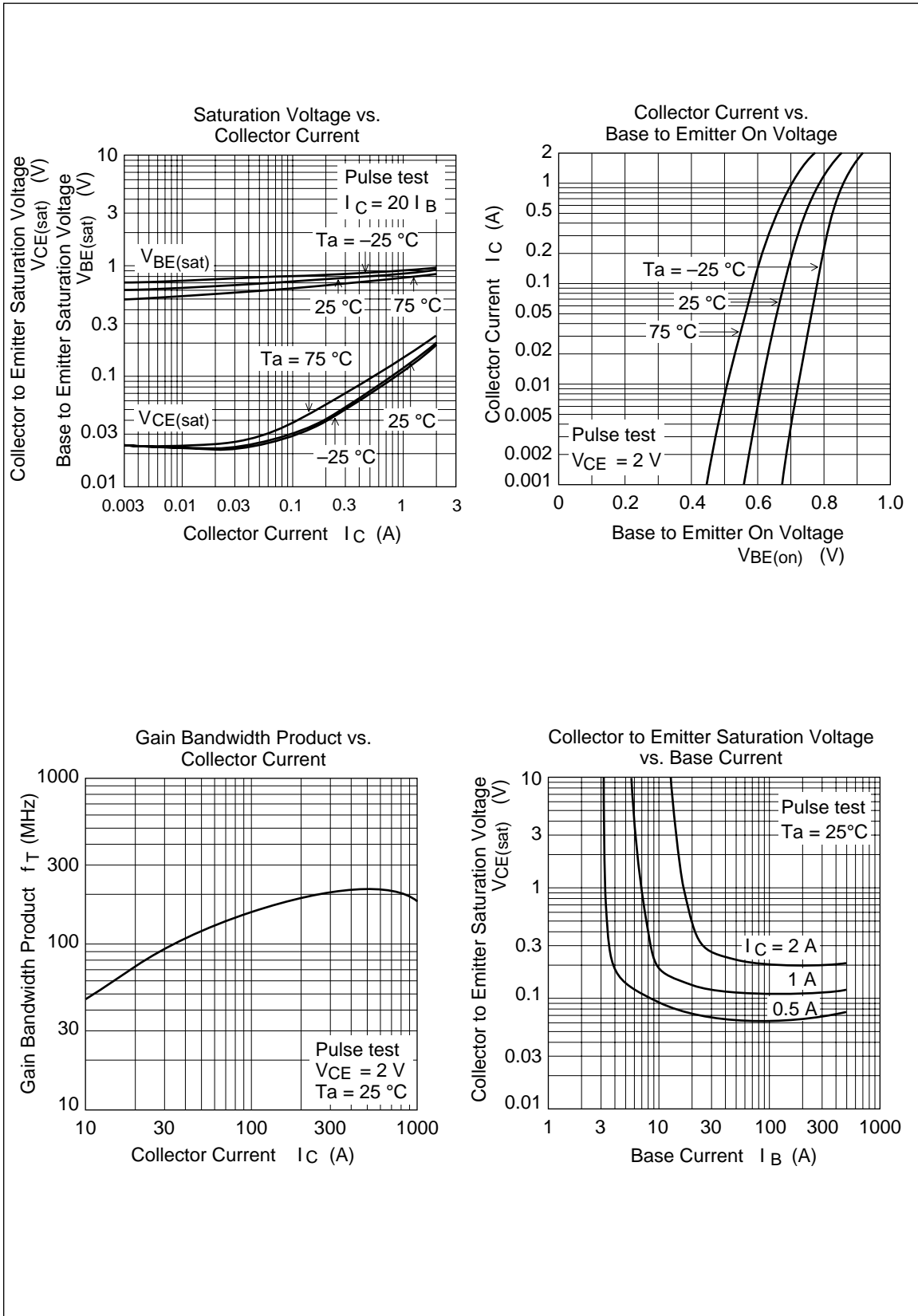
* Pulse test

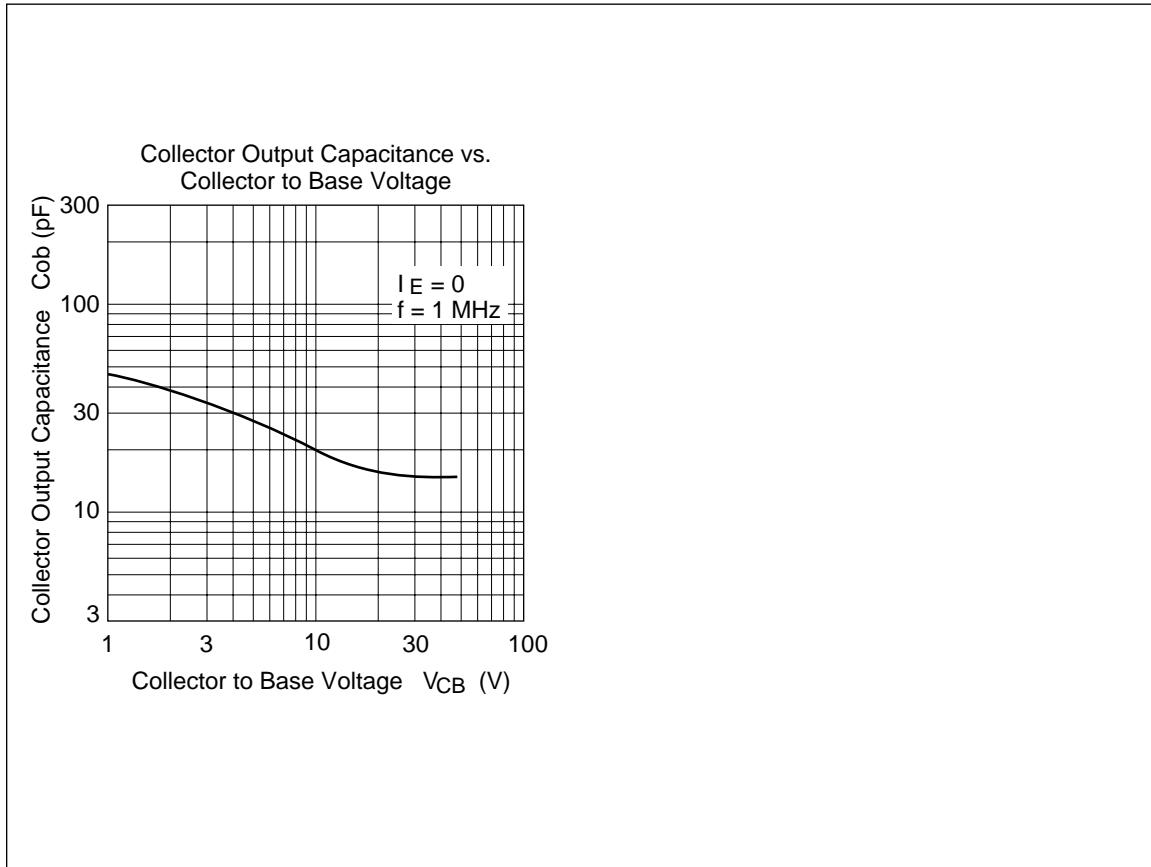


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Package Dimensions

Unit : mm

