

2SA1194(K)

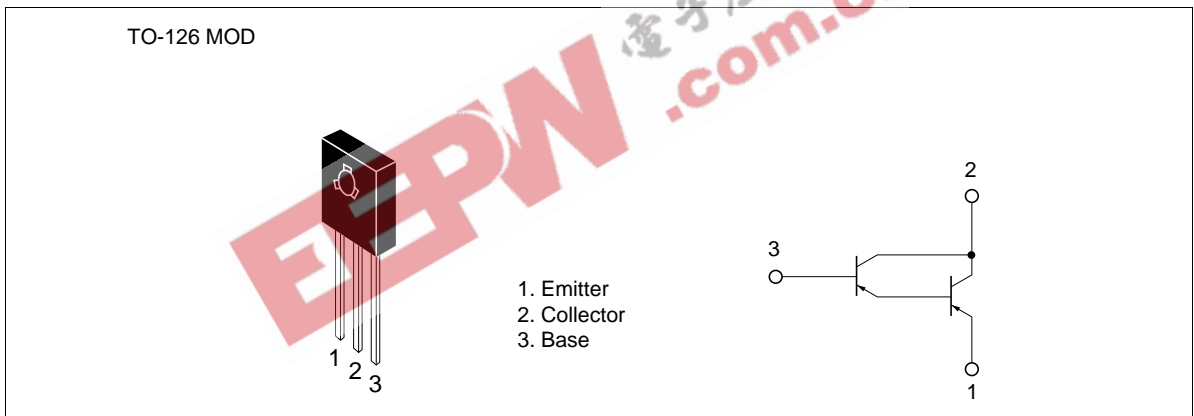
Silicon PNP Epitaxial

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Application

High gain amplifier

Outline



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

Item	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-60	V
Collector to emitter voltage	V_{CEO}	-60	V
Emitter to base voltage	V_{EBO}	-7	V
Collector current	I_{C}	-1	A
Collector peak current	$I_{\text{C(peak)}}$	-2	A
Collector power dissipation	P_{C}	1	W
	P_{C}^{*1}	8	W
Junction temperature	T_{j}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

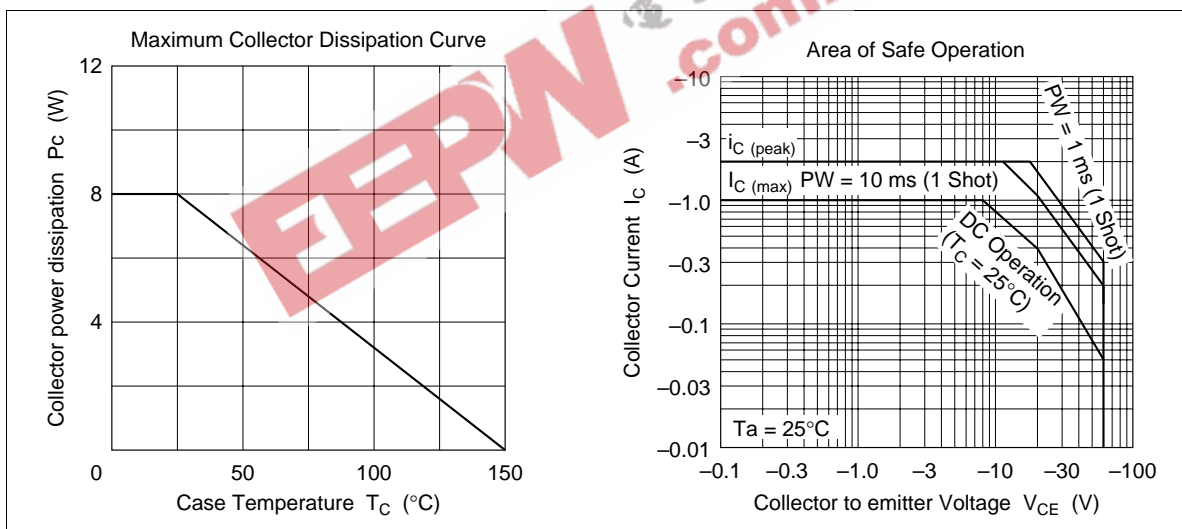
Note: 1. Value at $T_{\text{c}} = 25^\circ\text{C}$

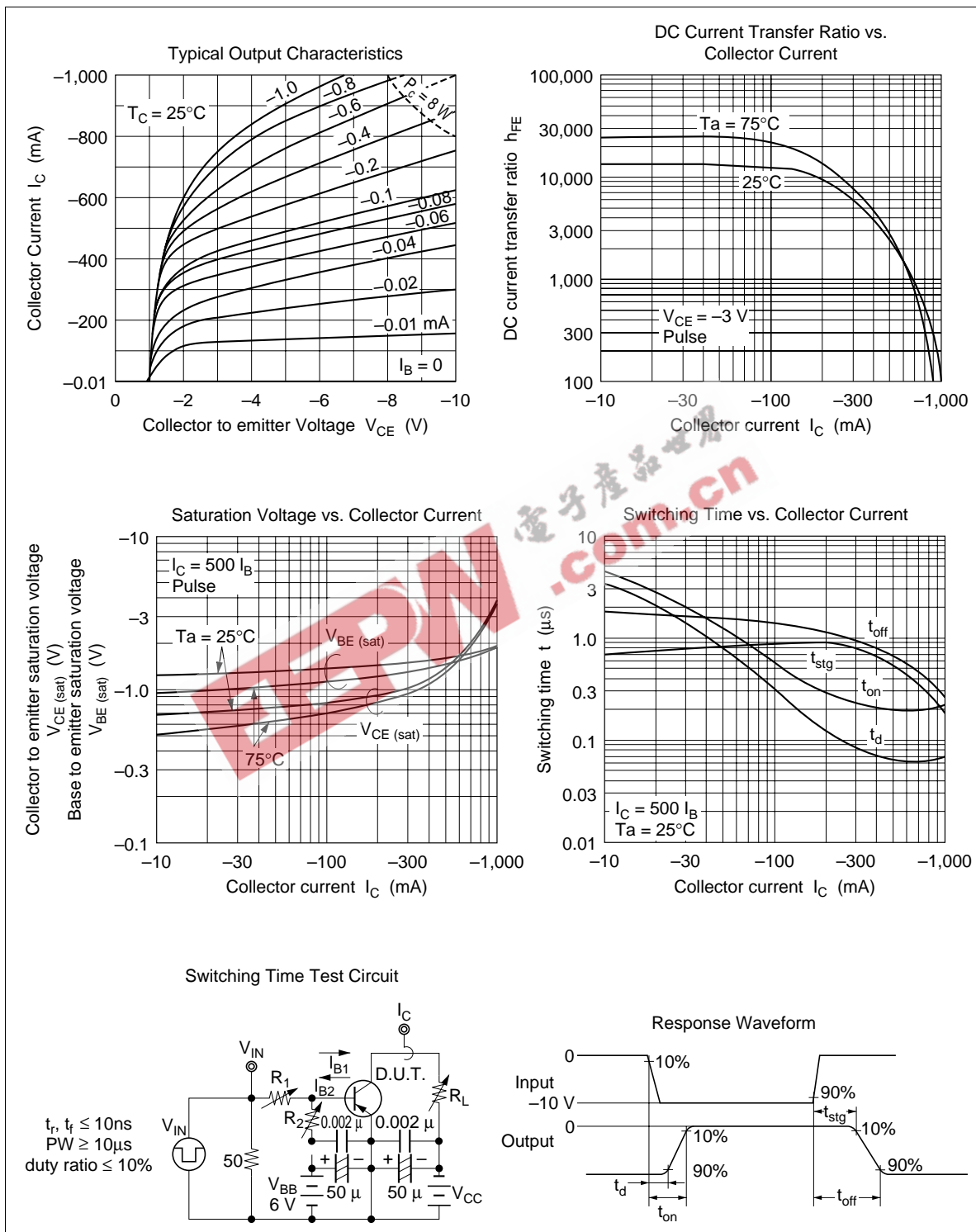
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Electrical Characteristics (T_a = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to emitter breakdown voltage	V _{(BR)CEO}	-60	—	—	V	I _C = -1 mA, R _{BE} = ∞
Collector cutoff current	I _{CBO}	—	—	-1.0	μA	V _{CB} = -60 V, I _E = 0
Emitter cutoff current	I _{EBO}	—	—	-1.0	μA	V _{EB} = -7 V, I _C = 0
DC current transfer ratio	h _{FE}	1000	—	—		V _{CE} = -3 V, I _C = -500 mA* ¹
Collector to emitter saturation voltage	V _{CE(sat)}	—	—	-2.0	V	I _C = -500 mA, I _B = -1 mA* ¹
Base to emitter saturation voltage	V _{BE(sat)}	—	—	-2.0	V	
Turn on time	t _{on}	—	0.7	—	μs	I _C = -500 mA
Turn off time	t _{off}	—	0.8	—	μs	I _{B1} = -I _{B2} = -1 mA

Note: 1. Pulse test





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