TOSHIBA Transistor Silicon NPN Triple Diffused Type

2SC5196

Power Amplifier Applications

- Complementary to 2SA1939
- Suitable for use in 40-W high fidelity audio amplifier's output stage

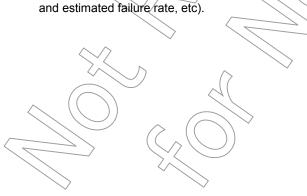
Absolute Maximum Ratings (Tc = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	80	V
Collector-emitter voltage	V _{CEO}	80	$(\nearrow \land)$
Emitter-base voltage	V _{EBO}	5	$\langle \psi \rangle$
Collector current	IC	6	A
Base current	ΙΒ	0.6	A
Collector power dissipation	D _o	60	W
(Tc = 25°C)	PC		VV
Junction temperature	T _j	150	/°C
Storage temperature range	T _{stg}	-55 to 150	< <c< td=""></c<>

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

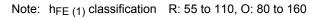
Weight: 4.7 g (typ.)

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/Derating Concept and Methods) and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

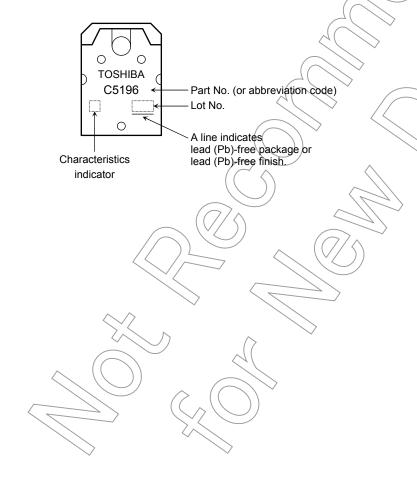


Electrical Characteristics (Tc = 25°C)

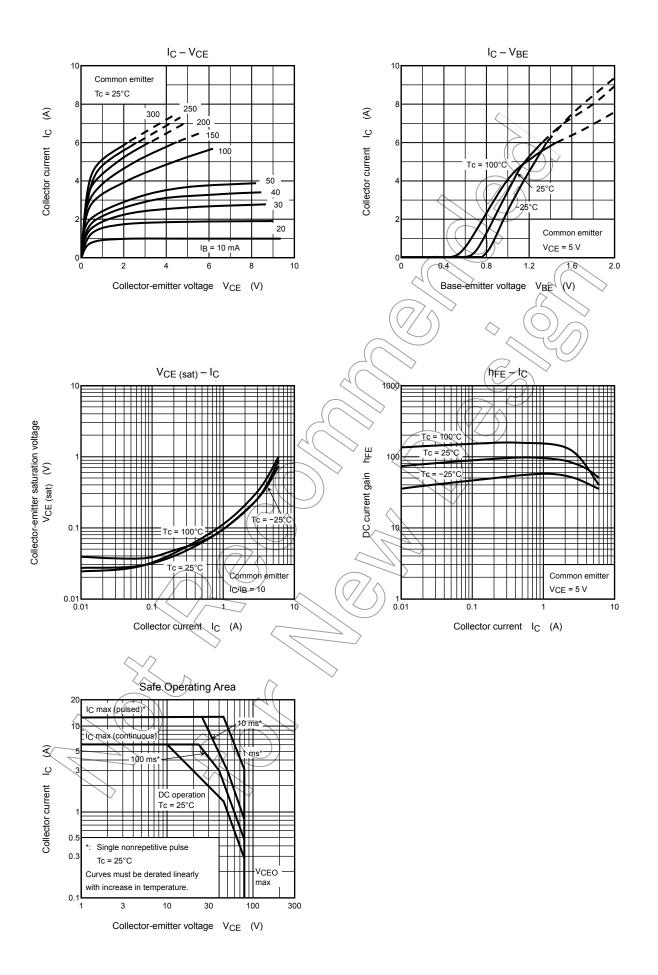
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 80 V, I _E = 0	_	_	5.0	μΑ
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	5.0	μΑ
Collector-emitter breakdown voltage	V (BR) CEO	I _C = 50 mA, I _B = 0	80	_	_	V
DC current gain	h _{FE (1)} (Note)	V _{CE} = 5 V, I _C = 1 A	55) } -	160	
	h _{FE (2)}	V _{CE} = 5 V, I _C = 3 A	35	75	_	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = 5 A, I _B = 0.5 A	$\bigcirc)$	0.45	2.0	V
Base-emitter voltage	V _{BE}	V _{CE} = 5 V, I _C = 3 A	_	0.92	1.5	V
Transition frequency	f _T	V _{CE} = 5 V, I _C = 1 A	_	30	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	75		pF



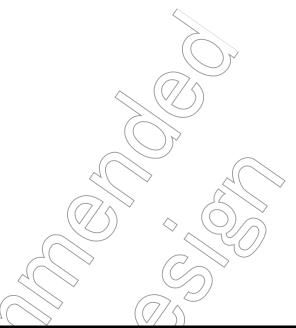




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RESTRICTIONS ON PRODUCT USE

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