TOSHIBA Transistor Silicon NPN Triple Diffused Type

2SC5198

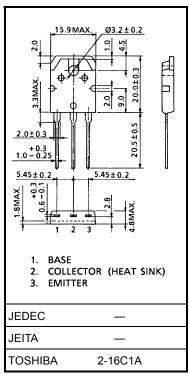
Power Amplifier Applications

Unit: mm

- High breakdown voltage: VCEO = 140 V (min)
- Complementary to 2SA1941
- Suitable for use in 70-W high fidelity audio amplifier's output stage

Maximum Ratings (Tc = 25°C)

Characteristics	Symbol	Rating	Unit	
Collector-base voltage	V_{CBO}	140	V	
Collector-emitter voltage	V _{CEO}	140	V	
Emitter-base voltage	V _{EBO}	5	V	
Collector current	I _C	10	Α	
Base current	Ι _Β	1	Α	
Collector power dissipation	Pc	100	w	
(Tc = 25°C)	FC	100	VV	
Junction temperature	Tj	150	°C	
Storage temperature range	T _{stg}	−55 to 150	°C	



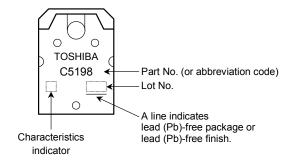
Weight: 4.7 g (typ.)

Electrical Characteristics (Tc = 25°C)

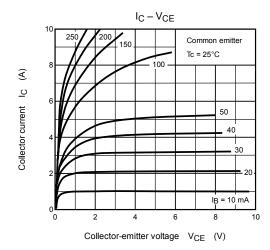
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 140 V, I _E = 0	_	_	5.0	μΑ
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	5.0	μA
Collector-emitter breakdown voltage	V (BR) CEO	I _C = 50 mA, I _B = 0	140	_	_	V
DC current gain	h _{FE (1)} (Note)	V _{CE} = 5 V, I _C = 1 A	55	_	160	
	h _{FE (2)}	V _{CE} = 5 V, I _C = 5 A	35	83	_	
Collector-emitter saturation voltage	V _{CE (sat)}	I _C = 7 A, I _B = 0.7 A	_	0.3	2.0	V
Base-emitter voltage	V_{BE}	V _{CE} = 5 V, I _C = 5 A	_	0.9	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	_	170	_	pF

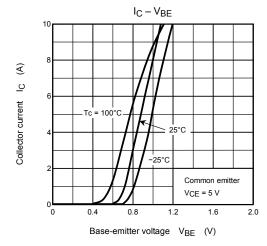
Note: h_{FE (1)} classification R: 55 to 110, O: 80 to 160

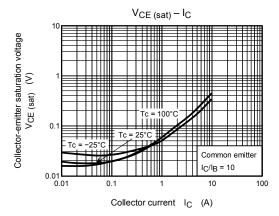
Marking

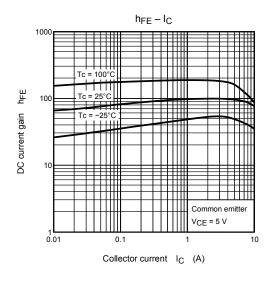


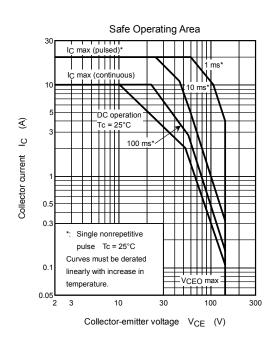
2 2004-07-07











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Handbook" etc..

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