2SC1518

Silicon NPN epitaxial planer type

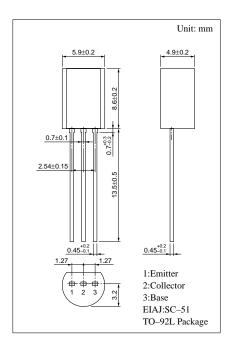
For high-frequency bias oscillation of tape recorders For DC-DC converter

Features

- ullet Low collector to emitter saturation voltage $V_{\text{CE}(sat)}$.
- Satisfactory operation performances and high efficiency with a low-voltage power supply.

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	25	V
Collector to emitter voltage	V_{CEO}	20	V
Emitter to base voltage	$V_{\rm EBO}$	5	V
Peak collector current	I_{CP}	1.5	A
Collector current	I_{C}	1	A
Collector power dissipation	P_{C}	1	W
Junction temperature	T _j	150	°C
Storage temperature	T_{stg}	−55 ~ +150	°C



Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 25V, I_{E} = 0$			100	nA
	I_{CEO}	$V_{CE} = 20V, I_B = 0$			1	μΑ
Collector to base voltage	V _{CBO}	$I_{\rm C} = 10 \mu A, I_{\rm E} = 0$	25			V
Collector to emitter voltage	V _{CEO}	$I_{\rm C} = 1 \text{mA}, I_{\rm B} = 0$	20			V
Emitter to base voltage	V _{EBO}	$I_E = 10 \mu A, I_C = 0$	5			V
Forward current transfer ratio	h _{FE1} *1	$V_{CE} = 2V, I_{C} = 500 \text{mA}^{*2}$	90		330	
	h _{FE2}	$V_{CE} = 2V, I_C = 1A^{*2}$	50	100		
Base to emitter saturation voltage	V _{BE(sat)}	$I_C = 500 \text{mA}, I_B = 50 \text{mA}^{*2}$			1.2	V
Collector to emitter saturation voltage	V _{CE(sat)}	$I_C = 1A, I_B = 50 \text{mA}^{*2}$			0.5	V
Transition frequency	f_T	$V_{CB} = 10V, I_{E} = -50mA, f = 200MHz$		150		MHz
Collector output capacitance	C _{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		12	20	pF

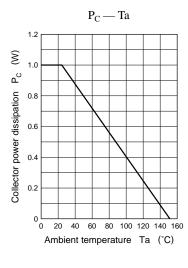
^{*2} Pulse measurement

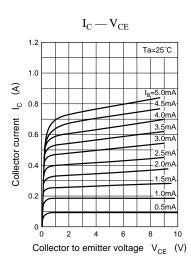
^{*1}hFE1 Rank classification

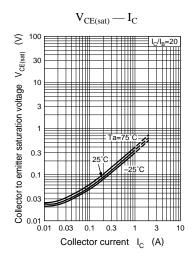
Rank	Q	R	S
h _{FE1}	90 ~ 155	130 ~ 220	185 ~ 330

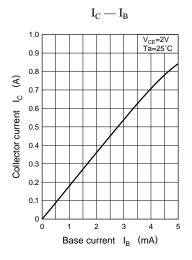
Panasonic

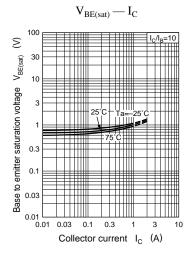
Transistor 2SC1518

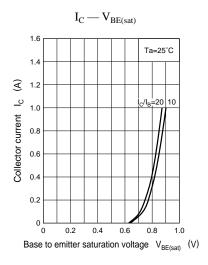


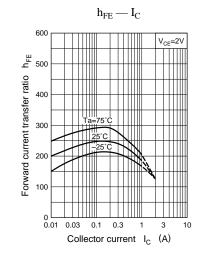




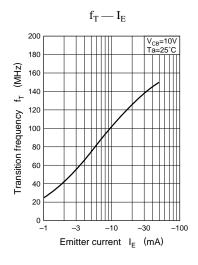


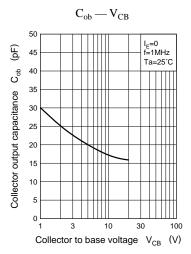




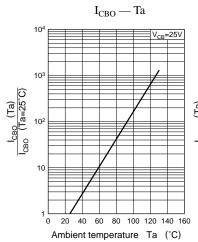


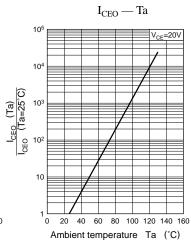
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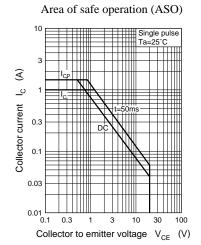




Transistor 2SC1518







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