20 STERN AVE. SPRINGFIELD, NEW JERSEY 07081 U.S.A. **2SC1509**

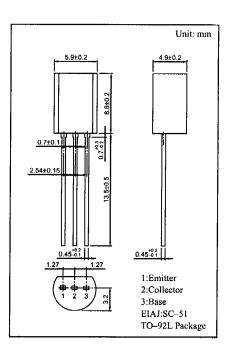
Silicon NPN epitaxial planer type

For low-frequency driver amplification Complementary to 2SA777

Features

- High collector to emitter voltage V_{CEQ}.
- Optimum for the driver stage of a low-frequency and 25 to 30W output amplifier.

Parameter	Symbol	Ratings	Ųnit
Collector to base voltage	V _{CBO}	80	v
Collector to emitter voltage	V _{CEO}	80	v
Emitter to base voltage	V _{EBO}	5	v
Peak collector current	I _{CP}	1	А
Collector current	I _C	0.5	А
Collector power dissipation	P _C	1	W
Junction temperature	Тj	150	°C
Storage temperature	T _{stg}	-55 ~ +150	°C



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Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I _{CBO}	$V_{CB} = 20V, I_E = 0$			0.1	μΑ
Collector to base voltage	V _{CBO}	$I_{\rm C} = 10 \mu A, I_{\rm E} = 0$	80			v
Collector to emitter voltage	V _{CEO}	$I_{\rm C} = 100 \mu A, I_{\rm B} = 0$	80			v
Emitter to base voltage	V _{EBO}	$I_{\rm E} = 10 \mu A, I_{\rm C} = 0$	5			v
Forward current transfer ratio	h _{FE1} *1	$V_{CE} = 10V, I_C = 150mA^{*2}$	130		330	
	h _{FE2}	$V_{CE} = 5V, I_C = 500 \text{mA}^{*2}$	50	100		
Collector to emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = 300 {\rm mA}, I_{\rm B} = 30 {\rm mA}^{*2}$		0.2	0.4	v
Base to emitter saturation voltage	V _{BE(sat)}	$I_{\rm C} = 300 {\rm mA}, I_{\rm B} = 30 {\rm mA}^{*2}$		0.85	1.2	v
Transition frequency	f _T	$V_{CB} = 10V, I_E = -50mA, f = 100MHz$		120		MHz
Collector output capacitance	C _{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		11	20	pF

*2 Pulse measurement

^{*1}h_{FE1} Rank classification

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

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