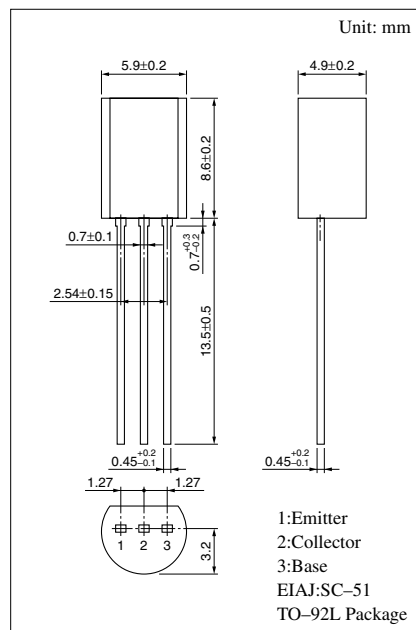


## Silicon PNP epitaxial planer type

Complementary to 2SC1509

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

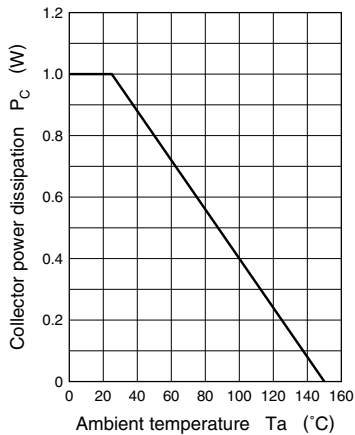
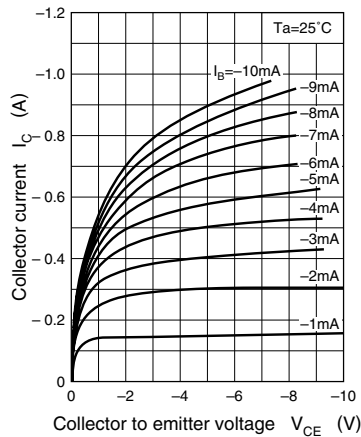
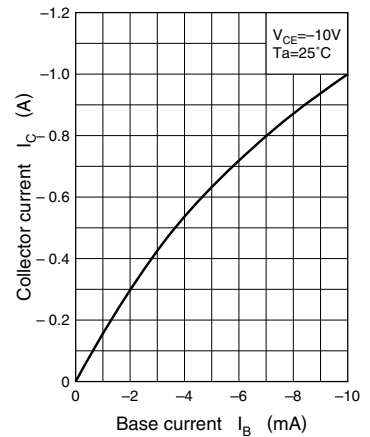
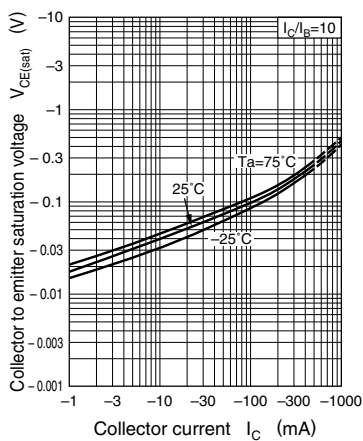
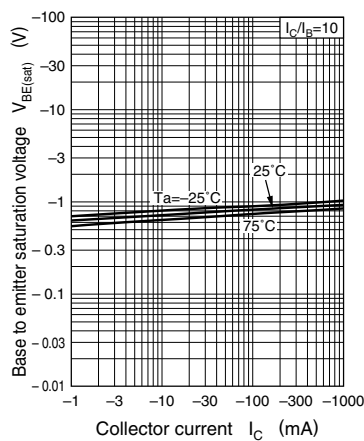
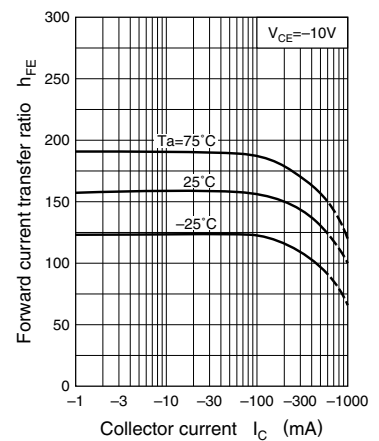
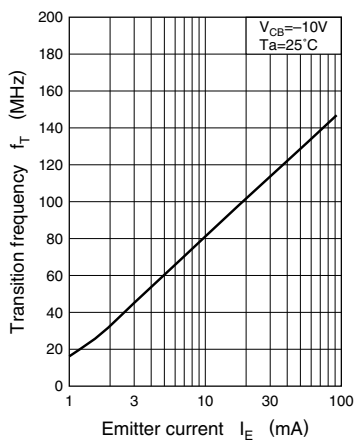
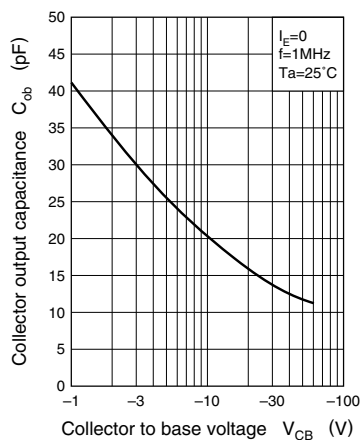
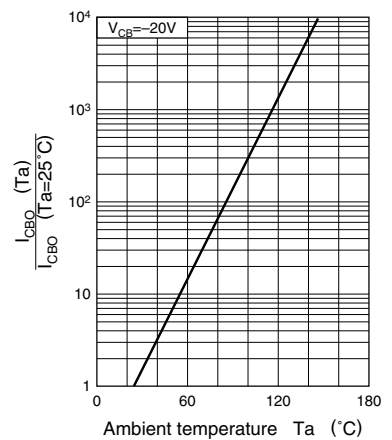
Parameter	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	-80	V
Collector to emitter voltage	$V_{CEO}$	-80	V
Emitter to base voltage	$V_{EBO}$	-5	V
Peak collector current	$I_{CP}$	-1	A
Collector current	$I_C$	-0.5	A
Collector power dissipation	$P_C$	750	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 ~ +150	°C



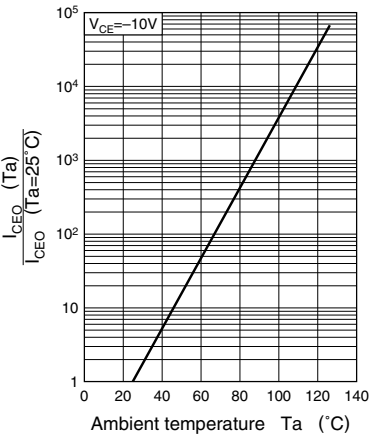
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = -20V, I_E = 0$			$-0.1$	$\mu A$
Collector to base voltage	$V_{CBO}$	$I_C = -10\mu A, I_E = 0$	$-80$			V
Collector to emitter voltage	$V_{CEO}$	$I_C = -100\mu A, I_B = 0$	$-80$			V
Emitter to base voltage	$V_{EBO}$	$I_E = -10\mu A, I_C = 0$	$-5$			V
Forward current transfer ratio	$h_{FE1}^*$	$V_{CE} = -10V, I_C = -150mA$	90		220	
	$h_{FE2}$	$V_{CE} = -5V, I_C = -500mA$	50	100		
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -300mA, I_B = -30mA$		$-0.2$	$-0.4$	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = -300mA, I_B = -30mA$		$-0.85$	$-1.2$	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

Rank	Q	R
$h_{FEI}$	90 ~ 155	130 ~ 220

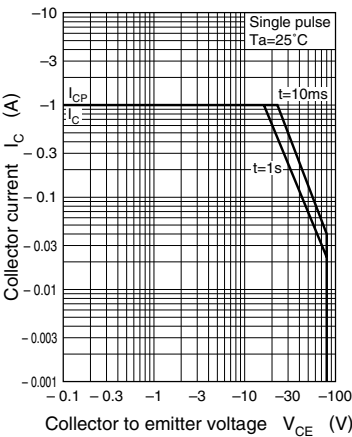
Note.) The Part number in the Parenthesis shows conventional part number.

$P_C - T_a$  $I_C - V_{CE}$  $I_C - I_B$  $V_{CE(sat)} - I_C$  $V_{BE(sat)} - I_C$  $h_{FE} - I_C$  $f_T - I_E$  $C_{ob} - V_{CB}$  $I_{CBO} - T_a$ 

$I_{CEO} - T_a$



Area of safe operation (ASO)



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