

2SC3929, 2SC3929A

Silicon NPN epitaxial planer type

For low-frequency output amplification

Complementary to 2SA1531 and 2SA1531A

Features

- Low noise voltage NV.
- High foward current transfer ratio h_{FE} .
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

Absolute Maximum Ratings (Ta=25°C)

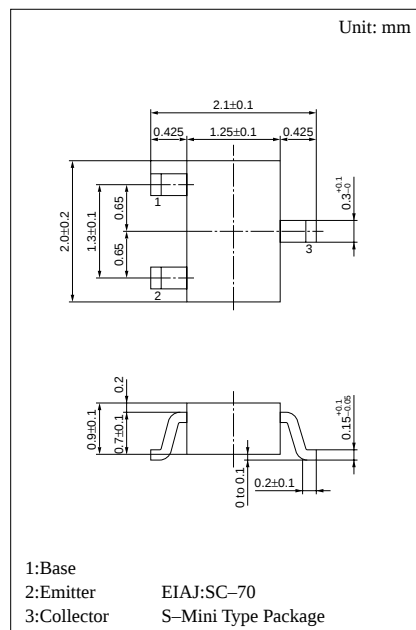
Parameter		Symbol	Ratings	Unit
Collector to base voltage	2SC3929	V_{CBO}	35	V
	2SC3929A		55	
Collector to emitter voltage	2SC3929	V_{CEO}	35	V
	2SC3929A		55	
Emitter to base voltage		V_{EBO}	5	V
Peak collector current		I_{CP}	100	mA
Collector current		I_C	50	mA
Collector power dissipation		P_C	150	mW
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	-55 ~ +150	°C

Electrical Characteristics (Ta=25°C)

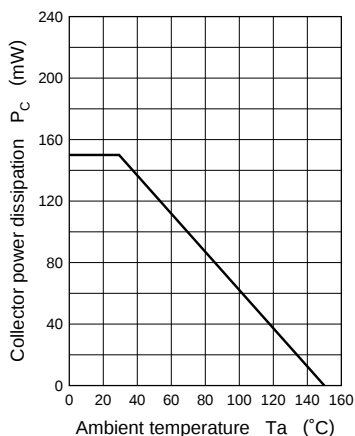
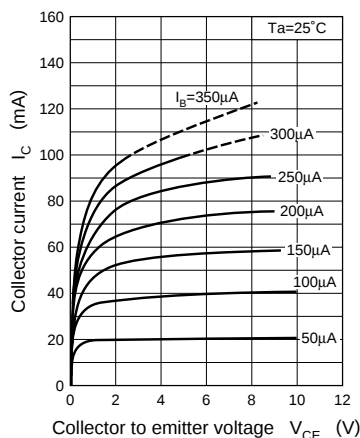
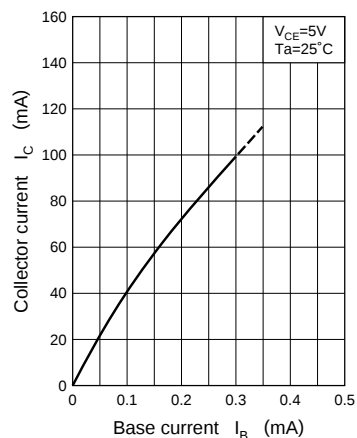
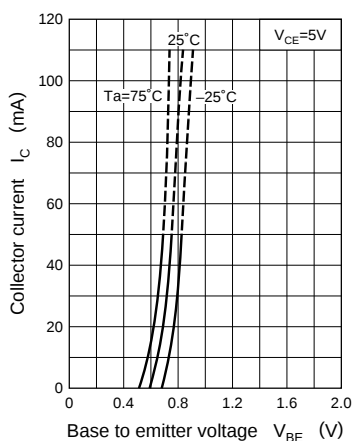
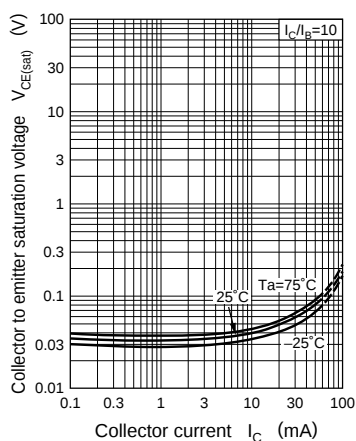
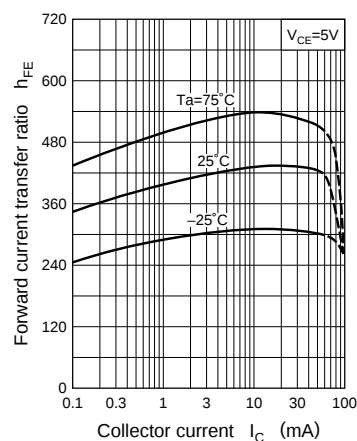
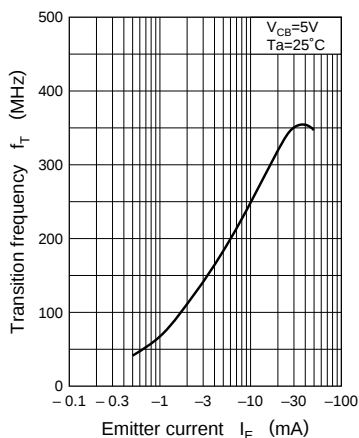
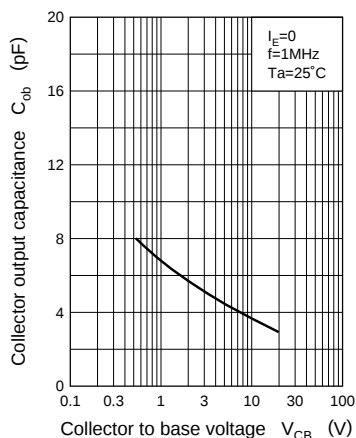
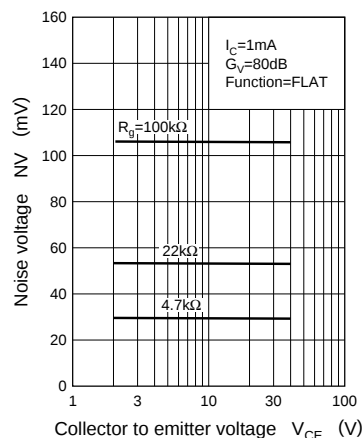
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 10V, I_E = 0$			100	nA
	I_{CEO}	$V_{CE} = 10V, I_B = 0$			1	μA
Collector to base voltage	V_{CBO}	$I_C = 10\mu A, I_E = 0$	2SC3929 35			V
			2SC3929A 55			
Collector to emitter voltage	V_{CEO}	$I_C = 2mA, I_B = 0$	2SC3929 35			V
			2SC3929A 55			
Emitter to base voltage	V_{EBO}	$I_E = 10\mu A, I_C = 0$	5			V
Forward current transfer ratio	h_{FE}^*	$V_{CE} = 5V, I_C = 2mA$	180		700	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$			0.6	V
Base to emitter voltage	V_{BE}	$V_{CE} = 1V, I_C = 100mA$		0.7	1	V
Noise voltage	NV	$V_{CE} = 10V, I_C = 1mA, G_V = 80dB$ $R_B = 100k\Omega, \text{Function} = \text{FLAT}$			150	mV
Transition frequency	f_T	$V_{CB} = 5V, I_E = -2mA, f = 200MHz$		80		MHz

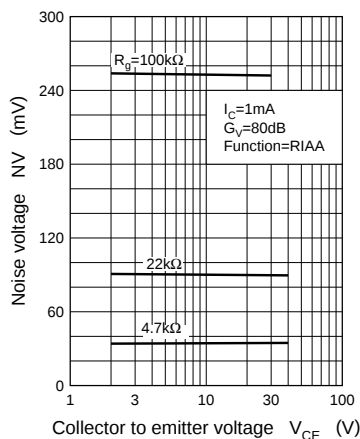
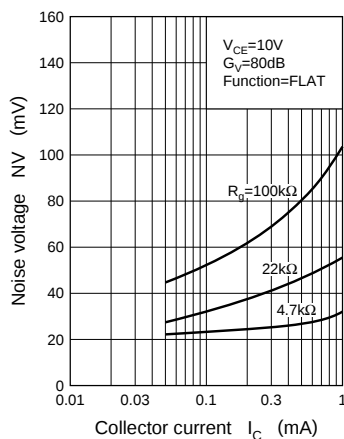
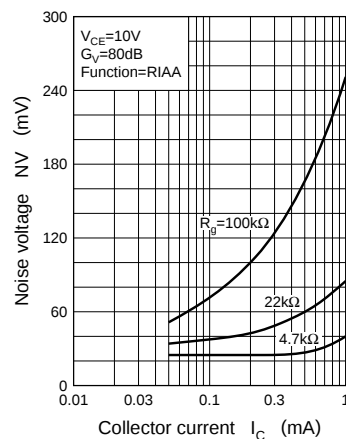
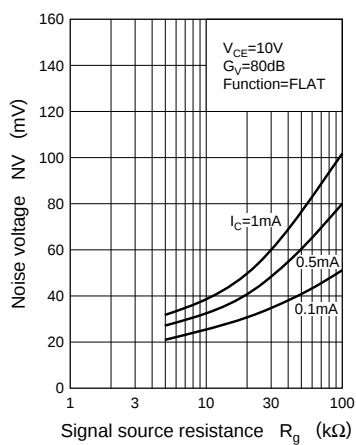
*1 h_{FE1} Rank classification

Rank	R	S	T
h_{FE}	180 ~ 360	260 ~ 520	360 ~ 700
Marking	2SC3929 SR	SS	ST
Symbol	2SC3929A TR	TS	TT



Marking symbol : S(2SC3929)
T(2SC3929A)

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

NV — V_{CE} NV — I_C NV — I_C NV — R_g NV — R_g 