2SC5363

Silicon NPN epitaxial planar type

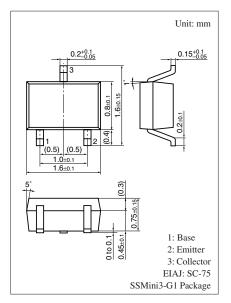
For low-voltage high-frequency amplification

■ Features

- High transition frequency f_T
- Small collector output capacitance (Common base, input open circuited) C_{ob}
- SS-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V _{CBO}	9	V	
Collector-emitter voltage (Base open)	V _{CEO}	6	V	
Emitter-base voltage (Collector open)	V_{EBO}	2	V	
Collector current	I_C	30	mA	
Collector power dissipation	P _C	125	mW	
Junction temperature	T_{j}	125	°C	
Storage temperature	T_{stg}	-55 to +125	°C	

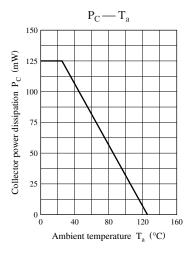


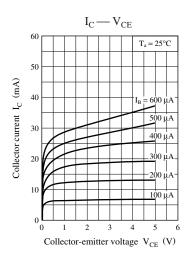
Marking Symbol: 3Y

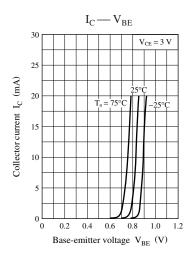
■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

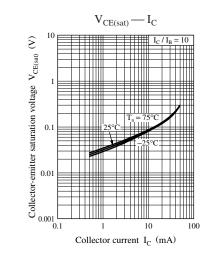
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 5 \text{ V}, I_{E} = 0$			1	μΑ
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = 1 \text{ V}, I_C = 0$			1	μΑ
Forward current transfer ratio	h_{FE}	$V_{CE} = 3 \text{ V}, I_{C} = 10 \text{ mA}$	40	100	160	_
Transition frequency	f_T	$V_{CE} = 3 \text{ V}, I_{C} = 10 \text{ mA}, f = 1.5 \text{ GHz}$		10		GHz
Collector output capacitance	C _{ob}	$V_{CB} = 3 \text{ V}, I_{E} = 0, f = 1 \text{ MHz}$		0.4	0.7	pF
(Common base, input open circuited)						
Forward transfer gain	S _{21e} 2	$V_{CE} = 0.3 \text{ V}, I_{C} = 1 \text{ mA}, f = 0.9 \text{ GHz}$		6.5		dB
Noise figure	NF	$V_{CE} = 0.3 \text{ V}, I_{C} = 1 \text{ mA}, f = 0.9 \text{ GHz}$		1.7		dB

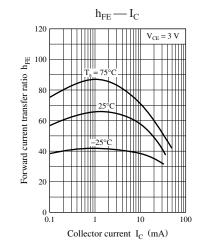
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

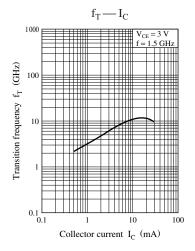


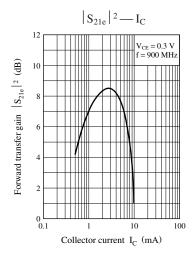


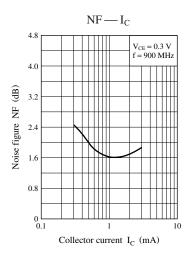


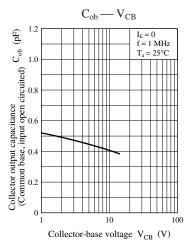












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