

DESCRIPTION

2SC5728 is a ultra super mini package resin sealed
silicon NPN epitaxial transistor,
It is designed for high frequency application.

FEATURE

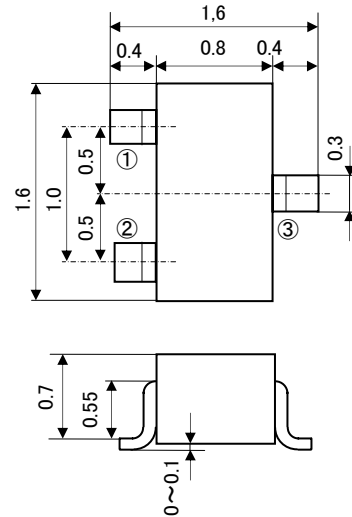
- High gain bandwidth product.
fT=10.0GHz
- High gain, low noise.
- Can operate at low voltage.
- Super mini package for easy mounting

APPLICATION

For TV tuners, high frequency amplifier , cellular phone system.

OUTLINE DRAWING

Unit: mm



JEITA: SC-90

TERMINAL CONNECTER

- ①: BASE
②: EMITTER
③: COLLECTOR

MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
V _{CBO}	Collector to Base voltage	15	V
V _{CEO}	Collector to Emitter voltage	6	V
V _{EBO}	Emitter to Base voltage	1.5	V
I _O	Collector current	50	mA
P _c	Collector dissipation	125	mW
T _j	Junction temperature	+125	°C
T _{stg}	Storage temperature	-55~+125	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
Collector cut off current	ICBO	V _{CB} =10V, I _E =0mA	—	—	1.0	μA
Emitter cut off current	IEBO	V _{EB} =1V, I _C =0mA	—	—	1.0	μA
DC forward current gain	hFE	V _{CE} =3V, I _C =10mA	30	—	250	
Gain bandwidth product	fT	V _{CE} =3V, I _E =10mA	—	10.0	—	GHz
Collector output capacitance	Cob	V _{CB} =3V, I _E =0mA, f=1MHz	—	0.7	—	pF
Insertion power gain	S ₂₁ ²	V _{CE} =3V, I _C =10mA, f=1GHz	10.0	13.0	—	dB
Noise figure	NF	V _{CE} =3V, I _C =5mA, f=1GHz	—	1.4	—	dB



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