

PRELIMINARY**2SC5727**

Notics:This is not a final specification.
Some parametric limits are subject to change.

FOR HIGH FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

2SC5727 is a 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 , celluar phone system.

MAXIMUM RATINGS(Ta=25)

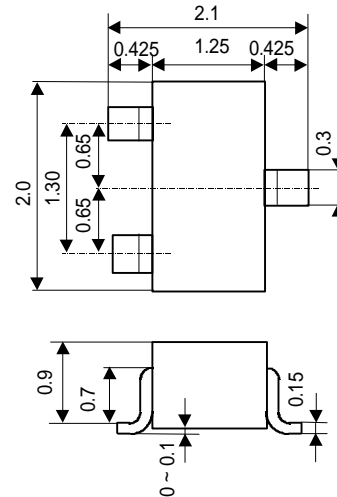
Symbol	Parameter	Ratings	Unit
V _{CBO}	Collector to Base voltage	15	V
V _{CEO}	Collector to Emitter voltage	6	V
V _{EBO}	Emitter to Base voltage	1.5	V
I _O	Collector current	50	mA
P _c	Collector dissipation	125	mW
T _j	Junction temperature	+ 125	
T _{stg}	Storage temperature	-55 ~ + 125	

ELECTRICAL CHARACTERISTICS(Ta=25)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
Collector cut off current	ICBO	V _{CB} =10V, I _E =0mA	-	-	1.0	μ A
Emitter cut off current	IEBO	V _{EB} =1V, I _C =0mA	-	-	1.0	μ A
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

OUTLINE DRAWING

Unit: mm



JEITA: SC-70

TERMINAL CONNECTER

- : BASE
- : EMITTER
- : COLLECTOR



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